A Course of Twelve Lectures

ON THE

STRUCTURE AND DEVELOPMENT

OF THE

VERTEBRATE SKELETON.

Now being delivered at the Royal College of Surgeons of England,

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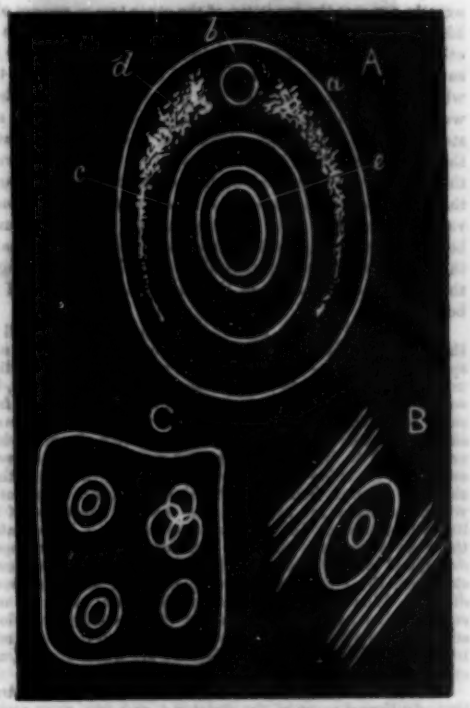
LECTURE I.

MR. PRESIDENT AND GENTLEMEN,—This structure is, as we all know, the framework or skeleton of one of ourselves. But it would be incorrect to regard it as the whole of that framework; for in the previous condition these bones were tipped with cartilages, and they were ensheathed in fibrous and tough membranes, termed periosteum, and that periosteum and many of the fibrous membranes extended to the surface of the skin, and there spread out into the deep layer of the integument, the whole being coated over with the epidermic layers. And if the skill of the dissector were adequate to the task, it is in the nature of things possible that every fragment of other tissue, whether muscle, or vessel, or nerve, should be dissected out from these tissues, which I have just mentioned as constituting the framework of the body, and yet that they should leave that framework essentially intact, having the same external form and the same character that it had before. This complete framework, composed of epidermic and epithelial structures, of fibrous, cartilaginous, and bony structures, is that which, in the broadest possible sense of the term, constitutes the skeleton; and we are obliged to use the term in that broad sense, not with a desire to extend the meaning of terms into vagueness, but because in dealing with other animals, more particularly with invertebrate animals, anyone of these constituents may become hard and dense and strong, and may constitute that which, in the more common application of language, we understand as the skeleton.

To state these facts a little more clearly, so that we may understand the divisions of the different parts of the skeleton. These different parts may be classified according to their relative position, and according to their histological structure, and on both these points I must say a few words.

If we make a generalised transverse section of the human body—say in the region of the thorax—we shall find that it may be represented by an outer circle covered by the epidermic layers of the integument, (Fig. 1, *a*,) an inner and upper cavity, (Fig. 1, *b*,) an inner and lower cavity—a double tube in fact, that being the feature which this transverse section of man has in common with the whole of the vertebrata. Within this second cavity there is a section of the intestines in one of its various regions to be found, (Fig. 1, *c*.) In this body you will see there are two free surfaces: there is an outer free surface, the surface of the skin; and there is an inner free surface, which is the surface of the intestine; both these surfaces being in direct communication with the exterior. These, for my present purpose, may be regarded as the only free surfaces of any moment. It is possible in the vertebrate series that hard parts may be developed; that is to say, that the parts of any portion of the body thus defined shall acquire a hard texture, and become skeletal elements, either in the epidermis, where they form plates of horn and coats of hair in the vertebrate series, and hard and calcified substances in the invertebrata; or they may be developed within the next deeper layer of the integument, which is the true skin; and in either of these cases they go by the name of the exoskeleton. I shall confine the use of the term "exoskeleton" to those hard parts which are developed either in the superficial or in the deep layers of the integument.

FIG. 1.



A, Section of a vertebrate animal. *a*, Skin. *b*, Nervous system. *c*, Serous sac. *d*, Vertebral plate. *e*, Intestine. *B*, Cartilage cells. *C*, Connective tissue.

It is possible, though rare in vertebrate animals—or at least, though these animals are very rarely greatly developed, it is more common in invertebrate animals, that a similar set of hard parts should be developed in connexion with the inner free surface; that is to say, you may have hardness of the epithelium of the alimentary canal, or hard, bony deposits within that layer of the integument which immediately follows the epithelium. That may be conveniently termed the splanchno-skeleton, a skeleton in connexion with the viscera. We all know from our studies of the structure of the human body that the layer next the free surface is always cellular, and avascular in structure; that is, if I make a section of the skin, the outer layer is composed of the cells of epidermis, is cellular and non-vascular; the deeper layer is composed of fibrous elements of true skin, and is vascular. There is therefore an inner or deep vascular layer, and an outer superficial avascular and cellular layer. The same statement holds good of the inner free surface: the superficial layer of that is composed of cells, the epithelium of the intestine; the deep layer of it is composed of fibrous tissue, and is vascular—that is, the proper mucous membrane. So that we have here, as in the other case, an outer or superficial, cellular, non-vascular layer, and a deeper or inner fibrous and vascular layer; and it would be necessary, in dealing with the skeleton in its broadest forms, tracing it through the whole of the vertebrate and invertebrate series, at times to distinguish very carefully between the elements developed from one of these sets of structure and the elements developed from the other.

Neither of these will concern us much at present. I mention them merely in passing. But there is a third skeleton, which is developed midway between the exoskeleton and the splanchno-

skeleton, in that partition which, as I have stated, is characteristic of the vertebrate animal to have between its nervous canal and its visceral canal, (Fig. 1, *d*.) It is a singular peculiarity of this skeleton, if you consider it in its entirety, that it exactly reverses the condition of the other two in respect of its histological elements or minute structure. While in both the others the free surface, or that which is turned towards the free surface, is cellular and avascular, and the deep surface, or that which is internal, is vascular and fibrous, in the endoskeleton we have the exactly opposite relations; for the innermost substance of it is primitively cellular and avascular, constituting that structure which I have mentioned, and which is known as the notochord or chordo-dorsalis, while its outer substance, that which is at first composed of fibrous tissue, and afterwards variously modified so as to constitute all this apparatus of bones, is vascular, and either cartilaginous or fibrous. That is the distinction in the different kinds of skeleton, according to their relations to the axis of the body and the surfaces of the body.

In vertebrate animals, the endoskeleton—and, indeed, all the three sets, but the endoskeleton is the only one of which I need speak particularly—is divisable into several parts, according, not to their relations to the primitive surfaces of the body, but according to their forward or backward position, and from some other circumstances. There is the skull, the cranial skeleton; there is the vertebral column, with the ribs which are attached to it, constituting what we may call for convenience' sake the spino-costal skeleton; and then there is a third skeleton, distinct from these, forming the girdles or arches to which the limbs are attached, and the solid substance of the limbs themselves. In vertebrate animals, as I have stated there are never more than two pairs of these limbs or appendages, and we may call this third skeleton the appendicula, skeleton: the cranio-facial, the spino-costal, and the appendicular. Whatever hypothetical or theoretical views we may entertain about these skeletons and their primitive relations, still it is certain that, as a matter of fact —and it is with matters of fact I now wish to deal—they are quite distinct, and may with great advantage be considered separately.

Finally, I must say a few words respecting the minute structure of different parts of the skeleton; and you must understand, if you please, that any of these various skeletons, or segments of the skeleton, may have a very varying histological composition. There is a structure which is peculiar to the notochord—a peculiar kind of cellular structure, which we may call the notochordal tissue. There is a structure which is called cartilage, and which consists essentially of a homogeneous matrix containing within it vesicular bodies and those substances which are called nuclei; and those vesicular substances with their nuclei may be arranged in various manners, or grouped in different ways, according to circumstances. Then you may have every transition from this cartilage up to that tissue which is termed connective tissue, or commonly, in English anatomical terminology, areolar tissue. The term "connective tissue" expresses absolutely nothing except that it connects parts, which it always does. The term "connective tissue" is far preferable, because we may have forms of connective tissue which are in no sense areolar. A still more improper term is "cellular," which is commonly applied to these tissues, because it is not in any sense a cellular structure. This connective tissue essentially consists of such bodies as these, (Fig. 1, C,) having very distinct shapes, differing in different parts of the body; and the intermediate substance, instead of being homogeneous and containing chondrine, is of a fibrinated character, and contains gelatine. It is that which I mean by connective tissue—that substance of which the so-called areolar tissue is constituted, of which ligaments and tendons are constructed, of which periosteum is made; and it is that substance, indeed, which forms by far the greater part of the soft skeleton, as apart from the hard skeleton, composed of bone and cartilage. Lastly, there is bone, which may be one of two things: either cartilage in which the homogeneous tissue has been replaced by calcareous matter, or connective tissue in which the fibrinated substance has been replaced by calcareous matters, and thus become converted into a hard substance. In the majority of cases, though by no means universally, that hard substance has the peculiar structure with which we are all familiar, containing those lacunæ or spaces called bone corpuscles.

Now, Mr. President, having cleared the way by these few definitions—statements which will make my meaning in using the terms hereafter intelligible,—I must state that which I propose to myself to do in the succeeding lectures, because it may seem strange that I should commence these lectures with a description of that which must be more familiar to many of my audience than it is to myself; the daily and hourly practice of the demonstrator giving him advantages in this respect which no one can emulate—I mean with the human skeleton. Let me state, then, that my purpose now is not to deal with the human skeleton in the ordinary way, or to attempt in any way to emulate those admirable topographical descriptions with which we are all quite familiar in our medical teaching. Still less do I propose to lead you on that long journey after hypothetical and very often very ill-based conceptions which have been given out as theories or hypotheses of the structure of the skeleton. On the contrary, I propose to defer all that question, as of comparatively little moment to us, until the last lecture, when I shall endeavour to see what basis there is for some of the views which have been propounded. What I propose to do is to take a line which is capable in all cases of being submitted to the test of fact and examination; because, after all, the matter for us is not so much the way in which we look at the things, as to know what the things are and what their relations really are; and I propose therefore, in dealing with the human skeleton—and perhaps it may take some little time to do this—not to go over the ordinary ground of human anatomy, taking the old familiar facts, but to arrange them before you as well as I can in such a way as will facilitate our study and comparison of the rest of the modifications of the vertebrate skeleton. I shall endeavour to point out to you what, if I were an architect, I should call the plan of the human skeleton; by which I mean—not anything by which the creative energy has been guided, I profess to know nothing about that; I mean simply—that which we with our finite intelligence can discover as a means of connecting together these isolated structures. Then, having done this with man, I shall turn to one of the most opposite extremes presented by the skeleton in the whole vertebrate series—namely, the osseous fish; and I shall endeavour to make out what parts in the skeleton of the osseous fish are certainly and without any difficulty whatsoever identifiable with the parts of the skeleton in man. We shall find, I hope, that there are a number which are identifiable by the most plain and definite tests; we shall also find that there are a very considerable number which are not identifiable, at any rate not identifiable at once. And then, turning from these two comparisons, we shall try to find out in what way, by calling to our aid development and the facts of comparative anatomy, we shall be able to bridge over that prodigious gulf which at first appears between the one extreme of the vertebrate series and the other.

And to-day I propose to discuss, as far as the limits of the hour will allow, the structure of the human cranium; assuredly not because it is the simplest example of a cranium I could find, for it is one of the most complex; certainly not because it is one of the easiest subjects I could select—on the contrary, it is one of the most difficult; but because all our anatomical studies in comparative anatomy and elsewhere have started from the human skeleton. Historically they have taken this course; therefore it is better to follow that historical method, and to begin with that which we have known the longest, to use the terms with which we are familiar, and then to apply those terms in the same senses in other parts of comparative anatomy.

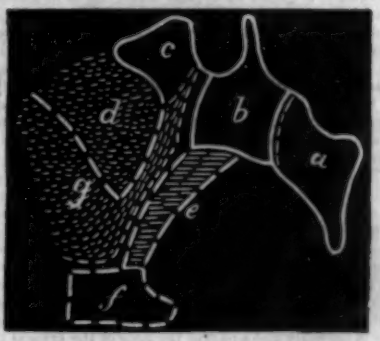
The human skull might be described as a great bony box, consisting of a large arched upper chamber, the cranium—and a smaller portion, the face. To make this clear, I show you a vertical and transverse section of the skull. The cranium lodges within its cavity the great mass of the brain; the bones of the face lodge the entrance of the alimentary canal, and furthermore the entrances of the respiratory passages. In this transverse section you see plainly that the upper or cerebral chamber lodging the brain — that brain being continuous with the spinal marrow through this large hole, the foramen magnum—is separated from the chamber formed by the bones of the face, which lies beneath it, by a strong and broad bony partition—strong, stout, and thick. That bony partition, inasmuch as it forms the centre or axis around which the bones of the skull and the bones of the face are arranged, is what I shall term the cranio-facial axis as a whole—the axis of the cranium and the face. I shall call that part which, as you see here in a longitudinal section (Fig. 5, *g* to *h*), belongs particularly to the cavity of the skull, the basi-cranial axis, because it is that axial portion of the bones which forms the basis of the cranium. And this part, which in like manner

forms the axis of the face, and may be termed (metaphorically speaking, at any rate) the base of the face, I shall term the basi-facial axis. So that we have the cranio-facial axis, consisting of its basi-cranial and basi-facial portion; the upper arch, formed by the bones enclosing the brain, and constituting the cranial cavity; the lower arch, formed by the bones of the face which are affixed to the skull.

Keeping still in mind this resemblance of the skull to a double box, with a partition forming the floor of the one and the roof of the other, let us for a moment consider certain cavities which are placed at the sides of it. Here is one of these—a double cavity—that of the nose; a cavity which, as a subsidiary function, forms an entrance to the respiratory passages; a cavity which, as its most important function, lodges the olfactory organs, one on each side of this little partition. We may call these the olfactory chambers, or the olfactory sacs if you will. Sometimes they have been termed the olfactory sense capsules. The term is of little moment. I may use indifferently one or the other. The next chambers, also one on each side of the skull, are these two large chambers which lodge the eyes, which are the orbits—two important organs of sense. You will note this very great distinction between the first pair of cavities and the second: that whilst in the first pair the mucous membrane lining them, and subserving the function of sensation performed there, is closely coherent with the surrounding bones,—in the second, as we all know, the organs which subserve the sensory function, the eyes, are spheroidal bodies lodged freely within the orbit, and may be moved about in various directions. But here we have a third pair of apertures—the apertures of the organs of hearing—auditory sacs, or auditory capsules, if you so please to call them; and these present us, not with the conditions of the eyes, but with the conditions of the nose; that is to say, that the chambers which are formed for the reception of the organs of sense, and which receive the expansions of the auditory nerve, are solidly lodged and fixed to the sides of the bones forming a portion of the walls of the cranium; so that the ear is no more movable from its lateral boundaries than the nose is. A box, then, with an upper and lower chamber, and three pairs of lateral chambers constituting the lodgment of the sensory organs of the three highest senses—this is perhaps the most general statement that can be made respecting the skull.

But now we must take this skull to pieces; and, as if we were working at the structure of a building (if I might be permitted to return to that metaphor), we must begin with the foundation—endeavour to see what the ground-plan is; and, as will naturally have suggested itself to you from what I have said already, that foundation—that fundamental part of the whole skull, whether of the cranium or of the face—must be sought in the basal axis; that is to say, in the cranio-facial axis. If I had trusted to nature, and merely separated the bones of the skull in the ordinary way, I should not, in an adult skull, have been able to get them apart, because it so happens that in the human skull a vast number of elements, which are perfectly distinct (and which I shall point out to you by-and-bye, when I come to speak of the development of the skull), become fused together into a solid and continuous mass. For instance, the bone which in human anatomy we call the occipital, is a continuous mass surrounding the foramen magnum, and is continued forward here; and in the adult skull there is no separation in the middle line until you come to this point. But if I take out all that bone, and describe it to you, as the old anatomists have done, under os basilare, or basal bone of the skull, I shall give you no impression of that which in the human skull is common to it, and a vast number of vertebrate animals. I have, therefore, supposed the sutures existed in the skull; and I have caused a saw to travel along the lines of those sutures, being very careful upon that point, making no artificial separation except as relates to the adult skull. They would not be artificial if I were dealing with the fœtal skull; and by doing this, and cutting off all those parts of the base of the skull which do not belong to it, I am able to take out of the skull this curious, irregular, elongated mass, which is the true basal axis of the skull, and wants only, even if it does want, the addition of a small bone behind with a cartilaginous prolongation to constitute the entire cranio-facial axis. It is that part which in this enlarged diagram of the skull extends from *m* to *q* (Fig. 5). Here it forms the base of the skull, as I have said; here it separates the olfactory capsules; here it separates the two chambers of the outer parts of the nose one from the other. The hinder part of this axis, if I put the two together, enters to a slight extent, as in mammalia generally, into the composition of the lateral condyles of the skull. In this hinder part it is broad

FIG. 2.



Cranio-facial axis. *a*, Bas-occipital. *b*, Basi-sphenoid. *c*, Pre-sphenoid. *d*, Ethmoid. *e*, Vomer. *f*, Pre-maxillary. *g*, Nasal septum.

and flattened, lodging, as we all know, the medulla oblongata; then it becomes thick and quadrate in this region; and in front of that again it is flattened from side to side, until at length, at its anterior extremity, where it forms a partition between the two nostrils, it is nothing but a flattened, vertical, and deep plate of bone. This plate of bone is composed of three, or rather, I should say, four distinct elements (Fig. 2, *a*, *b*, *c*, *d*); but in those which are joined together here only three belong to the basi-cranial axis—only three form any part of the floor of the true chamber of the skull. The hindermost of these is that which is marked *a* (Figs. 2 and 3), and which has been termed basi-occipital. (These terms being exceedingly convenient translations of those which were used by Cuvier and others in French anatomy, I shall use them.) These bones extend forward at a certain distance at the hinder part of the skull; and in the young state it is joined by a distinct suture, by a place filled with cartilage, as synchondrosis, which is quite visible upon the base of this young skull. That bone terminates and joins with the next in front of it: it is what in human anatomy we are familiar with as the basilar part of the occipital bone; it is the basi-occipital. In front of that bone, in the base of the skull, lies this broad mass which forms what we know in human anatomy as the middle part of the sphenoid, (Fig. 2, *b*, *c*). I need not repeat here what is the nature of the sphenoid bone. I suppose all of us have a tolerably clear recollection of the difficulty of remembering it: it is no doubt strongly impressed upon us by name, if in no other way; that and the temporal excite about the liveliest recollections of the student with regard to the names of bones. This great sphenoid bone in the young state consists of two totally distinct portions. One of them has upon its upper surface that saddle-like depression which lodges the pituitary fossa (Fig. 5, *u*); and this pituitary fossa (although the pituitary gland is a gland of whose functions we know absolutely nothing), in respect of the skull, is, perhaps, the most important of all its parts: it is the organic centre of the skull. I shall have frequently to refer to this pituitary fossa and to its meaning, and to the point of landmark it affords in tracing out various modifications of the basi-cranial axis. That pituitary fossa is lodged upon the upper part of the hinder division of the sphenoid bone, that part of the sphenoid bone which is attached to the great ala, or has the great ala attached to it: that is called the basi-sphenoid. Projecting from these parts of the basi-sphenoid, just outside the place where the carotids come up, the outer sides of the carotid grooves, are two little tongues of bone, which are very rarely mentioned in English works upon human osteology, but which are very well known to foreign anatomists under the name of linguiæ sphenoidales. I merely point them out now; I shall have to return to them more particularly by-and-bye. In the adult state this basi-sphenoid, which has the pituitary fossa on the top of it, is so thoroughly and completely united with the bones which lie immediately in front as to form one single piece, which we know as the body of the sphenoid; but in the young state the front part of this body of the sphenoid is composed altogether of three elements, which will be quite familiar to you. One of them is this plate like prolongation in the middle line, a plate which is compressed from side to side: the quadrate form of axis of the skull existing here has become changed into a plate-like form here, (Fig. 2, *c*.) This portion, which is prolonged forward, and which in the young state I have said is sepa-

rated from the hinder basi-sphenoid by cartilage, is termed the pre-sphenoid. We have no special name for it in human anatomy, but it is necessary in comparative anatomy, where it remains a distinct bone for a long time, and is called the pre-sphenoid or anterior sphenoid. Then there are two bones which we do know in human anatomy very well, which are commonly described as parts of the sphenoid, though in reality they have nothing to do with it; they are these curious little triangular, cup-shaped bones, placed one upon each side, which eventually become anchylosed with the pre-sphenoid. I have cut them away here on purpose, because they really do not belong to this bone. These are the well known bones of Bertin, or cornua sphenoidalia in human anatomy, which are ossifications of a distinct nature, separate from the sphenoid. On the front edge of the pre-sphenoid, strictly speaking, the basi cranial axis altogether terminates. You may perhaps be for a moment inclined to doubt that proposition, seeing that in front of this point, which is the front extremity of this pre-sphenoid, you have this long plate, terminating in the crista galli; you have this stretching along the floor of the skull: and you may say that this is properly also a part of the floor of the cranial cavity. But it is not so; it is not properly part of the floor of the cranial cavity, it is its front termination. It so happens, in consequence of the enormous development of the brain in man, this part of the ethmoid is thrown out into the horizontal position; but we shall find by-and-bye that that is a totally exceptional case, and, strictly speaking, this plate, which is horizontal in us, is, in reality, a vertical plate in its normal and natural condition, and has become turned down in consequence of the prodigious development of the anterior lobes of the brain. Strictly speaking, all the other parts of the cranio-facial axis are altogether beyond the cranial cavity. If this were the cranio-facial axis of a young person we should find in a lateral view that it had this aspect: we should find the synchondrosis between the basi-sphenoid and pre-sphenoid taking an oblique direction, (Fig. 3.) I will indicate its position thus. It runs as a line of cartilage in this direction (Fig. 3, *d*, *g*): it remains persistent for a very long time, and in the very young state (which I am obliged to refer to occasionally) we should find the cartilage thus continued forward in the middle line, occupying the whole of that space until you come to the termination of the nose; that is to say, there would be a continuous mass of cartilage forming the septum between the two nasal cavities, and extending backwards from the ridge of the nose to the front edge of the pre-sphenoid. But as development goes on certain ossifications take place here. The whole of this mass becomes ossified into one continuous body; it is a direct ossification of the cartilage: it is what we call the median plate of the ethmoid, in human anatomy lamina perpendicularis, (Fig 2, *d*.) Then at a very early period there was developed, not from the substance of the cartilage itself, but from the periosteal layer which is in immediate contact with it, a bone which forms a kind of sheath, hollow above, fitting round this cartilage as a half cylinder might round a rod, (Fig. 2, *c*.) That bone, extending backwards in the membranous substance which forms a partition between the nostrils, and extending forwards round this line of cartilage, unites with that lamina perpendicularis of the ethmoid, and it also unites with these bones which hold the two incisor teeth. This is the bone we know as the vomer. It is a matter of no very great moment whether you consider this vomer as an integral part of the basis of the skull or not; but supposing that we do consider it as a part of the basis of the skull, then you will observe that the cranio-facial axis consists altogether of these elements—basi-occipital, basi-sphenoid, pre-sphenoid, ethmoid, vomer, a continuation forwards in the inter-nasal cartilages; and these, we shall find by-and-bye, are the most essential elements which it presents in the whole of the vertebrate series. These are elements of which I shall have to speak very often, and which we shall be able to recognise under different shapes in almost the whole of the vertebrate animals.

Having thus defined the base of the skull, the next point is to consider the lateral walls, both upper and lower. And, in the first place, we may take the lateral walls which compose the sides of the brain-case. You have the names of these bones and their positions in the natural state placed here in a vertical and longitudinal section; we have them to a certain extent seen from without in an external view. But with regard to these two diagrams, I think it would be much more useful if I build them up one after the other with the help of chalk in a rough diagrammatic way, and I will draw them on a small scale (Fig. 3). We may begin from behind forwards, considering, in the first place, the bones which are connected with the basi-occipital. Upon each side of the basi-occipital bone, and forming the larger part of these two condyles which articulate with the front and uppermost bone of the spinal column, are two bones which were in the fœtal state, as we shall show by-and-bye, distinct one from the other. These are what we know in human anatomy as lateral portions of the occipital bone, the jugular processes, and so on. They are placed here articulating with the basi-occipital, one upon each side, (Fig. 3, *h*.) Then these two bones are joined together above by this, which we know as the squamous portion of the occipital bone, which is in man very largely expanded, and which constitutes an upper arch. I have not given its real position as in man; that you will get from the diagram, (Fig. 3, *i*.) At present I merely wish to give the relations to the base of the skull. Thus then we have three elements forming an upper arch: two lateral, the so-called ex-occipital bones (the occipito-externe of Cuvier), and the supra-occipital element, or squamous portion. Turn now to the basi-sphenoid, which is the bone in the middle line of the axis of the skull, coming next in front, (Fig. 3, *g*.) There are here these two large bones, what we know in human anatomy as the great wings of the sphenoid, and which in the fœtus, as you will see here, are quite distinct bones, as distinct as were the lateral portions of the occipital. These two bones occupy a position which we may represent in this way. They are the *grandes ailes* of French anatomists, which has been translated ali-sphenoids—a very good translation (marked *g* in the diagram). The two ali-sphenoids become connected, although the connexion is lost here in consequence of the peculiar arrangement of the human skull with these two great bones, which are the parietal bones, (Fig. 3, *k*.) So that there is a superior pair of bones forming an arch here, completing the arch, just as there was a single bone there completing the arch at the top of this occipital portion. The pre-sphenoid, it will be seen, gives attachment here to two little lateral processes, parts which we know in human anatomy as the smaller wings, the wings of Ingrassias, as they are often called. These *ailes orbitales*, or orbito-sphenoids, are attached here (Fig. 3, *f*), and above they become connected with these two great bones which give the human face its peculiar expression and character, and which we know as the frontal bones; these two frontal bones united together forming the upper arch, (Fig. 3, *l*.) So that without violating any natural arrangements very much, it is possible to take three saw sections—I do not say that they are strictly accurate, but it would be possible to make them strictly accurate by following the original sutures—it is possible to make out three perfectly distinct segments of the skull. The one we may call occipital, formed below by the basi-occipital, at the sides by the ex-occipitals, and above by the supra-occipital. The next we may call a parietal segment, formed below by the basi sphenoid, at the sides by the ali-sphenoids, at the top by the parietals. The third one we may call frontal, formed below by the pre-sphenoid, at the sides by the orbito-sphenoids, and above by the frontals. Without meaning anything more than that these are segments which do not naturally cohere together, it would be extremely convenient to speak of these as three segments of the skull. Whether they deserve any other

FIG. 3.

Diagrammatic view of side of skull. *a*, Basi-occipital. *b*, Basi-sphenoid. *c*, Pre-sphenoid. *d*, Ethmoid. *e*, Vomer. *f*, Orbito-sphenoid. *g*, Ali-sphenoid. *h*, Ex-occipital. *i*, Supra-occipital. *k*, Parietal. *l*, Frontal. *m*, Nasal. *n*, Nasal septum. *o*, Turbinals.

name, having reference to other parts of the skeleton, or not is a point I propose to defer entirely at present. I stand for the moment upon terms which are purely positive, and admit of no discussion.

But you who are familiar with human anatomy may say, and will say justly, that I have left out some constituents of the skull of no small importance. I have left out, for example, all those parts which form the front boundary of the exit of the skull, and which lodge the olfactory capsules. I have left out all those parts which lodge the organ of hearing, and are more or less connected with it; and I have left out one or two little accessory bones, which we know in human anatomy as malar and lachrymal. And the next point is to consider the precise position of these.

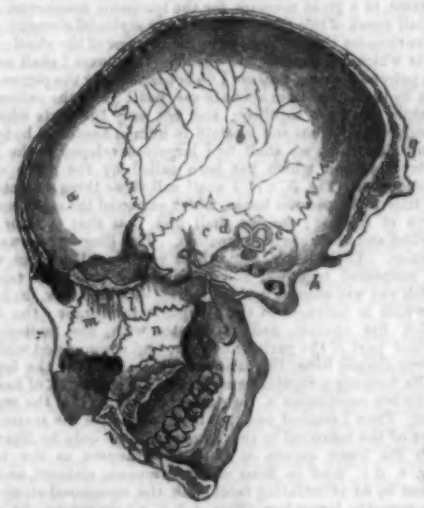
First, with respect to the olfactories. It will be observed that I have here made what is apparently an artificial separation between the middle part of the bone that we call the ethmoid and the lateral masses of the ethmoid, between the lamina perpendicularis and the turbinal bones. In point of fact, the lamina perpendicularis is a structure which is entirely independent of the lateral masses; as we shall see, it begins as a separate body altogether. I think the best way of making it intelligible will be, in a rough diagrammatic sort of way, to point out the relations of the two nasal sacs and of the cartilaginous capsules which surround them, to the bony matters which are developed in them. If this* is the septum between the two nasal organs, the two olfactory organs—if it represent this partition from this point to this—then each olfactory sac will lie upon each side of it. For the present I purposely leave out the inferior aperture, which does not concern us at the present moment. We will regard them as two sacs, one on each side, having their aperture in the external nostrils; those sacs primitively divided by a plate of cartilage forming the inter-nasal septum, and continuous with the lamina perpendicularis of the ethmoid, and they are arched over at the sides by a plate of cartilage which comes down here, and nearly (not quite) meets the middle septum below. Now there are

FIG. 4.

Side view of human skull. *a*, Frontal. *b*, Parietal. *c*, Squamosal. *d*, Ali-sphenoid. *e*, Malar. *f*, Maxillary. *g*, Supra-occipital. *h*, Malleus. *i*, Incus. *k*, Stapes. *l*, Tympanic. *m*, Mastoid. *n*, Styloid. *o*, Lachrymal. *p*, Os planum. *q*, Mandible. *r*, Nasal. *s*, Ala nasi. *t*, Pre-maxilla. *u*, Hyoid. 1, 2, 3, 4, Incisor, canine, pre-molar, and molar teeth.

two bones developed at the top of this in connexion with the frontals, and those, which are short and insignificant in the human subject, are what are termed nasal bones, (Figs. 4 & 5, *r*.) There are two great masses developed in the upper part of the sides of this capsule, which are the superior middle and turbinal bones—what are called the lateral masses of the ethmoid, as you are all well aware. And there is an inferior mass developed here, which is what we know as the inferior turbinal bone, (Fig. 3, *b*.) Then there is that bone forming a sheath along the lower part of this septum which is termed the vomer, (Fig. 5, *n*,) which you may consider, if you please, a primitive part of the axis of the skull, or simply as the floor of this partition between the capsules, (Figs. 2 & 3, *c*.) Lastly, the nasal sacs extend backwards with growth to the sides of the pre-sphenoid, and they there receive special ossification, which are the cornua sphenoidalia—the bones of Bertin. So that there are all these elements—at least five upon each side, with an inferior median piece—which are developed in connexion with the great olfactory sense capsules. And these different bones being fitted together, stop up, if I may so say, the front aperture of the skull, occupying all this portion of it. Therefore the front aperture of the skull is closed up by these two sense capsules. That part which we left undescribed here (Fig. 3, between *g* and *h*) is filled up in this way: the gap which was left behind, and which in the human skull is a very large one indeed, occupying all this large space between the ali-sphenoids, and ex-occipital, is filled up by a bone which is at once the most complex and the most important in the whole human skull. I speak of its importance from an anatomical point of view, and as that which undergoes the most remarkable series of changes in its course, if I may so say, through the vertebrate series. This is the bone

FIG. 5.



Section of human skull. *a*, Frontal. *b*, Parietal. *c*, Squamosal. *d*, Petrosal. *e*, Epiotic. *f*, Mastoid. *g*, Supra-occipital. *h*, Ex-occipital. *i*, Basi-sphenoid. *k*, Pre-sphenoid. *m*, Ethmoid. *n*, Vomer. *o*, Maxillary. *p*, Palatine. *q*, Mandible. *r*, Nasal. *s*, Ala nasi. *t*, Pre-maxillary. *u*, Sella turcica. 1, Olfactory foramina. 2, Optic foramen. 3, Foramen ovale. 9, Vagus. 9, Hypoglossal.

which is known in human anatomy as the temporal bone; and I must ask you to be good enough to give me your attention while I point out the different constituents and elements of the temporal bone, the different parts in which it is to be divided in the human subject and fœtus, and the parts which we shall find absolutely separate and taking very curious forms and positions in the lower vertebrata. Permit me, in the first place, to call to your minds, what you all know so well, the terminology which is applied to the different parts of this complex bone in human anatomy. This part is called the squama of the temporal, or squamosal part of it, (Fig. 4, *c*;) this, with its process, so characteristic of man, is the mastoid part, (Fig. 4, *m*.) This we know commonly as the external auditory meatus; and this incomplete ring of bone which surrounds it is less known in the terminology of human anatomists, but still it is known to a certain extent as the tympanic bone, (Fig. 4, *l*.) Then there is all this part in the interior of the skull, which, on account of its hard, firm, dense nature, received from the old anatomists the name of the petrosum, (Fig. 5, *d*.) All this part we recognise well enough in human anatomy. And, besides that, you are well aware that there is in the human skull generally a large process projecting downwards, which is called the styloid process, and is connected with the hyoid

* The lecturer here showed his meaning by a chalk diagram.

bone, (Fig. 4, *m*.) And furthermore, within the interior of the drum of the ear there are placed certain small bones which are connected with the function of hearing, and known by the names of malleus, incus, and stapes, (Fig. 4, *h*, *i*, *k*.) All these are constituent elements, and familiar to the student of human anatomy.

But this rough definition will not quite suit my purpose for travelling with you afterwards into the minutiæ of the great features of vertebrate anatomy, so singular and so remarkable are the changes which the different parts of these bones undergo. I will ask you first to consider with a little more attention what are the precise functions and purposes of the different parts of this very remarkable apparatus. In this diagram is the bone viewed from within. Here is the petrosal portion; here is part of the mastoidal portion, and here is the squamosal portion, as seen from the interior of the skull, (Fig. 5, *d*, *f*, *c*.) In the young subject the squamosal portion is perfectly distinct, is a separate bone, and we shall call that bone which corresponds with it in the vertebrate series the squamosal bone. It remains distinct up to a comparatively advanced period, as you will see in this specimen of the fœtal skeleton. The tympanic bone again, this ring which forms the greater part of the auditory meatus, is in the fœtal skeleton a perfectly distinct ring of bone—an open, incomplete ring of bone; but it becomes large, and unites with the other elements, as we know it in the adult state. I shall speak of it as a tympanic element; it serves as a frame, in a great measure, for the tympanic membrane. Then I shall speak of this styloid process as a styloidal element. Then there remains this great mass in the interior of the skull—those parts which are obvious and visible. This mass I shall not call the petrous portion, because I do not mean only the petrous portion by the terms I am about to use, but I mean the petrous and mastoid portions together; and not only the parts which we recognise as petrous and mastoid in human anatomy, but something else which we shall find largely developed in the lower vertebrata, and which has been called by the name of the epiotic bone, (Fig. 5, *e*.) I shall call these three elements by the title of the periotic bones, which surround the capsule of the organ of hearing; for we shall find that that is their most marked and characteristic function. This diagram shows their position. Then, lastly, come those very singular bones which are connected together, and have pretty much the relations which you will observe in this diagram—the malleus, the handle of which is fastened to the tympanic membrane; the incus, which fits against, and articulates with, the malleus, and against part of the periotic capsule, and is connected with that stirrup-shaped bone, the inner of which fits into the fenestra ovalis, forming a regulative apparatus for the organ of hearing, as the iris constitutes a regulative apparatus for the organ of sight. Then I remind you that connected with the styloid element of the temporal in the human subject only by ligaments with the lesser cornua is that bone known as the hyoid, (Fig. 4, H.) And in front of the tympanic element, and connected by an articulating facet with the squamosal element, is this movable lower jaw, (Figs. 4 & 5, *g*,) consisting of a single piece upon each side, the two pieces becoming anchylosed together in the middle line, and having, as you are well aware, a free motion upon this facet.

TOBACCO-SMOKING: ITS EFFECT UPON PULSATION.

BY EDWARD SMITH, M.D., LL.B., F.R.S.,
ASSISTANT-PHYSICIAN TO THE HOSPITAL FOR CONSUMPTION, BROMPTON.

WHILST staying at Scarborough last summer a talented medical friend, Mr. D——, expressed his belief that smoking tobacco increased the rapidity of his pulse, and as he had consulted me in reference to some important symptoms, which would at least be aggravated by that state, I determined to enter upon a systematic inquiry into the subject, both upon himself and such other friends, chiefly medical, as could be found in a short time.

Mr. D—— had drawn his inference from the fact that the rate of pulsation was certainly greater in the evening, after having smoked, than at other periods of the day; but as I have long since shown that the rate naturally varies at every hour of the day to the extent of 20 to 40 pulsations per minute, such a general examination would not establish the fact. Diagram No. 2 in my work on the "Cyclical Changes in the Human System" exhibits the varying rate of pulsation at each hour of the day, and shows that there is a large and rapid increase after, and a corresponding decrease before, each meal, so that it is not only almost impossible to say what is the average daily rate of pulsation of any person with a view to obtain a standard of comparison, but it is most difficult to find any period of the day in which the rate will not vary from internal conditions other than those on which an inquiry may be made. The diagram, however, shows that before breakfast the pulse is low and tolerably stationary, and it is at that period only that I have made my experiments on the action of foods. But it also shows that in the evening, after about nine o'clock, the pulse exhibits a manifest tendency to decline. We found in former inquiries that substances which would increase the rate of pulsation greatly at other periods of the day would only with great difficulty maintain the existing rate at nine or ten o'clock in the evening. Hence this would be a most improper period to inquire into the effect of any agent which lessened the rate of pulsation, since the diminution might be due to natural causes; but if at that period a substance increased the rate of pulsation, the fact of its doing so against the natural tendency of the system would show that its true influence would be greater than the actual results would indicate. Hence, by selecting this period, we had the advantage of using the time commonly allotted by smokers to their pipe, and put the alleged action of tobacco to the most severe *experimentum crucis*.

The course pursued was as follows:—No food was taken after six o'clock, and then a moderate meal only was eaten, whether dinner or tea. After the meal the time was occupied chiefly in sitting and reading, and at half-past nine to ten o'clock the inquiry began. The most perfect quietude was maintained for ten minutes before, and throughout the whole inquiry the sitting posture was not varied nor exertion of any kind made. With the body in this state of repose, the rate of pulsation was determined minute by minute before the experiment began, so as to obtain a correct basis quantity for comparison with the rate which would be ascertained during the experiment, and we were not satisfied until we found the natural rate had become stationary. A pipe was then filled with tobacco, and lit just before the commencement of a minute, and the rate of pulsation was recorded with a long second's hand each minute continuously for twenty minutes, unless the tobacco was previously consumed.

Sept. 2*nd*, 9.37 P.M.—(Basis, 74½ pulsations.)

		Average.
6 minutes	... 79, 77, 80, 78, 78, 77	= 78·1
7 ,,	... 83, 87, 88, 94, 98, 102, 102	= 93·4
8 ,,	...105, 105, 104, 105, 105, 107, 107, 110	= 106·
After smoking 11 minutes	112, 108, 107, 101, 101, 100, 100, 100, 100, 98, 91	

Thus during the first six minutes the effect was very small—only an increase of 3 to 4 beats per minute; but after that period there was a steady and rapid increase until the twenty-first minute, when the tobacco was consumed. The average increase from the sixth to the thirteenth minute was 19 pulsations, and thence to the end of the experiment, 31½ pulsations per minute; but the total increase in one minute was 37½ pulsations. Whether a further increase would have been attained had the experiment been continued we cannot tell; but from the order of the increase it is probable that such would have occurred in some degree, yet such increase has always its limits. The experiment, however, abundantly proved the powerful effect of tobacco upon Mr. D——.

Sept. 3*rd*, 10.14 P.M.—(Basis, 74½ pulsations.)

		Average.
6 minutes	... 81, 81, 81, 83, 82, 82	= 81·6
17 ,,	85, 89, 89, 93, 96, 90, 94, 94, 93, 92, 93, 95, 95, 96, 94, 97, 93	= 93·

I was then desirous to ascertain if drawing the smoke through water, after the fashion of the Eastern nations, would remove any property which possessed this exciting power over the heart, and the above is the result of such an experiment, only that the hookah was, without my knowledge, charged with camphor julep. The result shows that there was still an in-

crease in the heart's action, amounting to an extreme of 17½ pulsations, and an average of 13½ pulsations per minute after the effect had commenced. As in the former experiment, there was but little effect during the first six minutes.

It was now desirable to prove whether the act of smoking, apart from the tobacco smoke, had any influence over the pulse; and Mr. D——, in another experiment, performed the act of smoking, but with an empty pipe, and the result was as follows:—

Sept. 9th, 9 7 P.M.—(Basis, 78 pulsations.)

11 minutes ... 76, 78, 77, 76, 79, 79, 80, 80, 79, 78, 79;

which showed that the act had no influence over the result.

We hence regarded it as established that tobacco-smoking did materially increase the rate of pulsation in Mr. D——, and that there was no effect during the first six minutes. It was desirable to ascertain if any reaction occurred by continuance of smoking, and also if a person could smoke for six minutes without having an effect produced upon the pulse after he had ceased.

The first could not be proved with the exactitude of the above experiments, for, as we have stated, the pulse would naturally fall as the night advanced; but Mr. D—— ascertained at intervals that up to midnight the pulse did not fall below 90, which was presumptive evidence that there was no reaction of that kind.

The second was established by a separate experiment.

Sept. 10th, 9.42 P.M.—(Basis, 75 pulsations.)

7 minutes: 76, 75, 79, 79, 76, 78, 82. Having reached the 7th minute as before, the effect began, and the smoking ceased. The following was the rate afterwards:—

10 minutes: 81, 88, 81, 83, 82, 84, 83, 83, 80, 82; which shows that there was no increase in the rate after the smoking had ceased.

The last experiment upon Mr. D—— was to show if the rapidity of smoking varied the result which had thus been established.

Sept. 8th, 9.7 P.M.—(Basis, 70½ pulsations.)

1st. He smoked in greater volume.

			Average.
6 minutes	...	68, 70, 71, 70, 72, 74	= 70·8
6 ,,	...	76, 77, 86, 89, 91, 94	= 85·5
4 ,,	...	98, 95, 96, 95	= 96·

The effect during the first 6 minutes was scarcely perceptible; during the next 6 minutes there was an average increase of 15 pulsations; and in the last 4 minutes an average increase of 26 pulsations. There was not therefore any marked difference due to the volume.

2nd. He smoked faster at 9.32 P.M.—3 minutes, 94, 94, 96; and then recharged the pipe—87, 93, 96, 96, 96. Which showed that there was no variation from the rapidity observed at the end of the first series.

Hence neither increased volume nor increased rapidity exhibited any marked variation from the effect of ordinary smoking.

In concluding the experiments upon Mr. D——, it must be remarked that his rate of pulsation is less affected by excitement and bodily exertion than in men in general. He is strong and in middle life.

The inquiries were then prosecuted upon other medical friends, Dr. H—— and Dr. M. R——. Dr. R——'s heart was so excitable that it was almost impossible to keep the thoughts so under control as to prevent an increase in the rate of pulsation.

Sept. 9th, 8.33 P.M., tea having been taken at six P.M.—(Basis, 82.)

85, 85, 84, 80, 94, 94, one missed, 84, 84, 88, 89, 86.

Hence the effect in twelve minutes was but small, unless we consider that the temporary increase of twelve pulsations was due to the tobacco.

Sept. 10th, 9.5 P.M.—(Basis, 65.) He smoked the strongest bird's-eye tobacco.

			Average.
7 minutes	...	64, 64, 64, 65, 67, 64, 65	= 64·7
7 ,,	...	70, 70, 70, 71, 74, 68, 71	= 70·5
5 ,,	...	76, 77, 77, 81, 81	= 78·4

There was no increase during the first 7 minutes, but during the second 7 minutes the average increase amounted to 5½ pulsations, and during the last minutes to 13½ pulsations per minute. The extreme increase was 16 pulsations.

In an experiment upon Dr. R—— whilst smoking a cigar, no effect was exhibited in 12 minutes.

Sept. 9th, 9.37 P.M. Tea taken at 6 P.M.—(Basis, 84.)

84, 84 85, 84, 86, 84, 83, 85, 86, 84, 87, 86.

When smoking the strong bird's-eye tobacco the effect was very small, but it is to be remarked that he smoked with only about one-third of the rapidity of Mr. D——.

Sept. 10th, 10.6 P.M. Tea taken at 6.—(Basis, 73.)

			Average.
10 minutes	...	76, 75, 73, 74, 71, 74, 71, 74, 73, 73	= 73·4
6 ,,	...	77, 79, 81, 77, missed one, 74, 75	= 77·1

There was no effect during the first 10 minutes, and the average increase in the following 7 minutes was only 4·1 pulsations per minute.

I have not had the opportunity to determine its effect in disease, except in a case of consumption, in which disease the pulsation sometimes becomes high in the evening.

In the first experiment there was a diminution in the rate of pulsation to the extreme of 8 pulsations per minute, whilst in a second experiment there was no variation in the rate. In the former experiment the basis pulsation was high—viz., 90, and the pulse fell to 82 in 18 minutes; whilst in the latter the basis was 78, and the average of the whole 20 minutes was also 78; and hence it is probable that the former basis was incorrect.

The inquiry which I have thus explained is only in its infancy, but I think it has sufficed to show that tobacco acts variously upon different persons, and that there are those in whom it increases the action of the heart in an important degree. This difference must be sought for in the mode of smoking, the quantity of tobacco consumed in a given time, the reputed strength of the tobacco, and the habits and temperament of the smoker; and upon these questions I would offer an observation or two, with a view to further inquiry.

1. *The mode of smoking.*—I do not smoke, but I have very carefully tested the mode of smoking, and agree with those who affirm that in ordinary circumstances the tobacco smoke is not mixed with the air in inspiration and carried into the lungs. The position of the throat is that which occurs in ordinary breathing through the nose—viz., the soft palate falls down, and the tongue is raised, so as to cut off the communication between the mouth and the throat. The two acts do not necessarily take place simultaneously. Whenever, as by an accident, a little tobacco smoke is inhaled, the smoker is at once conscious of irritation or choking in the throat, probably followed by cough. If anyone have doubt upon this matter, let him endeavour to smoke with the nostrils closed and he will find the act impossible; but it may yet be possible that in cases in which affections of the throat are found in smokers the act may be performed carelessly, or from some cause the tobacco-smoke may frequently touch the pharynx. If the tobacco-smoke be not thus taken into the system, in what manner are the effects upon the pulse induced? It must be chiefly through solution in the saliva, which is then partly absorbed by the absorbent vessels, and partly swallowed, and thus introduced into the system. Whether frequent spitting would prevent or lessen the action needs to be further tested, but within limits it is probable that it would lessen it.

2. *The quantity of tobacco consumed in a given time.*—In pursuing the inquiry it will be important to aim at uniformity in this respect, and direct that the act be nearly constantly performed so that the smoke may not escape from the open bowl, and that an ordinary bowlful be consumed in 20 minutes. Although it did not appear from Mr. D——'s experiments that rapidity of smoking varied the result, we must remember that the effect of the tobacco upon the pulse had then already been attained, and he is conscious that rapid smoking would make him ill, whilst smoking at the ordinary rate would be agreeable.

3. *The strength of the tobacco.*—Smokers speak of strength of tobacco in two senses. Those accustomed to the fancy kinds of tobacco assert that the common shag or Virginian tobacco would make them ill, and also that certain tobaccos is to hot in the mouth. These two statements may probably refer to the two principal constituents of the tobacco—viz., the narcotine, which is so powerful a poison, and the empyreumatic oil, which would cause irritation of the mucous membrane of the mouth; and it is certain that, whilst the wholesale dealers in tobacco find many of the present fancy tobaccos in the same hogshead produced from the same soil, there are also diversities in the constituents of the tobacco, grown under different climates, upon different soils, and prepared for the market in different manners. I believe that with smokers in general the idea of strength is much more the effect upon the mouth than upon the general system. In the experiments referred to, the strong Bristol bird's eye had no more effect upon the pulse than the so called milder forms. It is probable that smoking is very much a gratification rather of the palate than of the sensorium.

4. *Habits and temperament.*—Both Mr. D—— and Dr. H—— were well-inured smokers; but, as we have seen, the effect upon them was well marked. Dr. H—— is beyond comparison more sensitive in temperament than Mr. D——, and yet the effect of tobacco upon him was much less. Hence, in reference to this action upon the pulse, neither of these conditions can be accepted as grounds for variation in the effect.

I have referred in this paper to the action upon the pulse only, and not to the supposed sedative action upon the system generally, both because such an action is quite new to us, and because it is the only one of the two which can be well defined; but I do not for a moment wish to be understood to mean that this general action does not exist. It is, however, now impossible to look upon a dreamy state, a semi-narcotism, as the essential one of tobacco smoking; for when the pulse is excited in the manner now shown, the action is one of stimulation as perfect to appearance as if induced by food, and as fitted temporarily, and under proper conditions of food, to excite the activity of the brain or other organs. If the experience of literary men has shown that in some the necessary activity of brain is obtained only after the exhibition of strong wines and spirits, it may now be proved that in certain persons tobacco-smoking produces a similar result, and by quickening the pulse, and in a certain degree filling it also, it may excite all vital actions. In such a state of atonicity of system, when tobacco produces the effect upon the heart already described, it is easy to believe it a remediable agent of great value. But if there be not a state of atonicity, but on the other hand a tendency to fulness of system, what so certain as that this important action upon the heart must lead to disturbed sleep and conditions tending to apoplexy?

Queen Anne-street, W., March, 1863.

ON A

CASE OF NÆVUS OF EYELID, TREATED BY PUNCTURE WITH THE HOT NEEDLE; CURE.

BY J. C. WORDSWORTH, F.R.C.S.,
SURGEON TO THE ROYAL LONDON OPHTHALMIC HOSPITAL.

A. M'A——, aged eight months, was brought to the Royal London Ophthalmic Hospital on the 4th of October, 1862, on account of a nævus, affecting the whole of the left upper eyelid to such an extent that its motions were much impaired, and it was stated that the growth was rapidly increasing. The skin of the lid was of a dark-red colour, and completely involved in the nævus. On everting the lid, the mucous lining, too, was found to be marked by large vessels, being evidently part of the nævus, that penetrated through the tarsal cartilage. When the child cried, a considerable swelling became apparent. I considered the case well adapted for treatment by the hot needle, and ventured to promise a complete recovery. The friends at once assented to my advice, and it was therefore submitted to operation the same day. A few inspirations of chloroform produced full anæsthesia—a condition most desirable for such an operation, for many reasons. A needle, on which is a bulb about one-third of an inch from its point, intended as a reservoir of heat, and set in a handle, was heated to *dull redness* in the flame of a spirit-lamp. The eyelid was raised from the globe by means of an ivory spoon, inserted into the palpebral sinus, so as to protect the eye, as well as to form a firm basis for the lid. A considerable number of punctures was then made through the entire substance of the lid, the needle being heated as often as necessary during the operation. In this way all the large vessels of the lid were apparently closed by the heat of the needle, punctures being made over its entire extent, at distances of about one line apart. Wet lint was applied, and the case treated as a burn. Adhesive inflammation ensued, producing induration and subsequent contraction of the substance of the lid.

In about a month from the operation the nævus was reduced to a few scattered vessels over the lid which had escaped the influence of the cautery; and as they produced some deformity, and might probably increase in size and number if left, I repeated a few punctures around them. From that time the case has required no further treatment. The nævus has completely disappeared, leaving scarcely a trace of deformity. On the 7th of February the child was discharged, cured.

The gratifying result of this case needs no comment. I believe that it could not have been equalled by any other treatment; indeed, from having adopted this means in several other cases, I am convinced it affords such excellent results, and is at the same time so safe and so manageable, that it should supersede all others in the treatment of superficial nævi. I know of no other mode by which these growths, in such positions as this occupied, could be so effectually destroyed—without producing injury or deformity on the structures concerned. And as the only opprobrium to the actual cautery is now so effectually removed by chloroform, it is probably the most painless of all procedures that we adopt for the cure of nævus, and is divested of its terrors.

I may take this opportunity of adding one or two practical hints on the application of the cautery, as I have known disappointment occur through inattention to the principles involved in this mode of treating nævus; and I have myself failed to attain a cure by one operation where a little bolder use of the remedy might have sufficed.

1. As to the *temperature* of the needle. On this depends its influence, the object to be attained being the production of such an inflammation as will seal the vessels without causing death of tissue: a black or dull-red heat is required; in fact, such a temperature as will prevent the punctures from bleeding seems the most effectual. If the needle be applied (as I have witnessed) white hot, it simply burns a hole, and is productive of an eschar, instead of an induration.

2. As to the extent of the application, and the distance between the punctures. All visible vessels should be closed by the cautery, and the skin rendered pale. To do this, punctures, about a line apart, should be made over the whole nævus; and disappointment may be prevented by extending them a little beyond its boundaries to the normal tissues. This is better than having to repeat the operation, and does not add either to present suffering or produce subsequent evil.

3. In reference to a repetition of the cautery. Here, again, we must remember that contraction will continue for some time after the infliction of the burn, as under other circumstances of burning. Then, if we are too ready to repeat the cautery, we may not only be doing a work of supererogation, but may also produce greater effect than we desire.

For these reasons, having once effectually used the cautery, I am content to wait so long as there is any prospect of continued contraction before repeating it, unless I find the tumour still remains erectile, or some large vessels still patent and visible. With these precautions, I believe the profession will find this not only the safest but the most effectual of all remedies for the treatment of nævus. And I am fain to hope, that it will be yet more extensively employed to remedy those harmless but unsightly "mother's marks" that so often mar the beauty of many a fair face, and rob their unwilling possessor of the bright side of life.

Queen Anne-street, March, 1863.

A Mirror

OF THE PRACTICE OF

MEDICINE AND SURGERY

IN THE

HOSPITALS OF LONDON.

Nulla est alia pro certo noscendi via, nisi quam plurimas et morborum et dissectionum historias, tam aliorum proprias, collectas habere et inter se comparare.—MORGAGNI. *De Sed. et Caus. Morb.*, lib. 14. Proœmium.

KING'S COLLEGE HOSPITAL.

MONOCYSTIC TUMOUR OF THE OVARY; TAPPING SIX TIMES; OVARIOTOMY; RECOVERY.

(Under the care of Mr. FERGUSSON.)

ON the 21st of February the operation of ovariotomy was resorted to at King's College Hospital by Mr. Fergusson upon a young woman twenty-six years of age, in one of the most crowded theatres we ever remember to have witnessed. We shall give the particulars in as nearly as possible the operator's own words.

At the conclusion of the operation, Mr. Fergusson observed

that the patient had suffered from ovarian disease for four years, and had been tapped during that time on six different occasions. The fluid had increased very rapidly after each operation, the last having been performed but a few weeks ago. To-day between four and five gallons had been removed, as near as he could guess the quantity. The patient had been sent up to him by an old friend, Dr. Cooke, of Scarborough, under whose observation she had been throughout her illness. That gentleman thought the case a suitable one for ovariotomy, and she was placed under him (Mr. Fergusson) to undergo it, if he thought it necessary. She came to the hospital three weeks ago, when there was but slight accumulation of fluid since the last tapping. He was desirous to see more of the case before undertaking any operation; but the fluid increased so rapidly that it threatened very speedily to exhaust her. She was otherwise perfectly healthy and of sound frame; the organs of generation were also sound; and it seemed a very eligible case for this operation—indeed particularly eligible, for the tumour appeared to be composed of but one cyst, and one that he might calculate upon removing through a small opening in the abdomen. There was a single ground for hesitation, but not of much importance—namely, there were adhesions, apparently, at the front part of the abdomen and sides. Now they were considered to be objectionable; but in some instances, where they had been found numerous and extensive, good results had followed the operation notwithstanding. It became a question whether they could be broken up by cutting or tearing them away, as, from the comparative youth of the patient and the short standing of the disease, they would probably be neither strong nor extensive; she had had, moreover, no symptoms of inflammatory action.

The operation here consisted in taking the cyst out of a very limited incision—one that may be called limited now-a-days, for formerly it would have been considered out of the rational bounds of surgery. Through the small incision he was desirous of drawing off all the fluid without letting any escape into the abdomen. Perhaps the nicest part of the operation was the incision down to the sac, for if there had been strong adhesions it would have been difficult to distinguish between the sac and peritoneum, examples of which he had seen. He was glad to find, on cutting through the abdominal parietes between the naval and pubes, that he could recognise the space between the peritoneum and sac, for he fortunately had struck upon a point where there were no adhesions. This, in his estimation, much simplified matters; but on passing his fingers upwards he could feel some, which were sufficient to keep up the impression beforehand that they might have been extensive. These he could not separate without introducing his hand, when they were all readily broken down, and he took care to draw out the tumour in such a way (in the progress of tapping) that neither fluid, blood, nor air could gain access to the abdominal cavity. It was gradually extracted with the pedicle, wonderfully small and narrow, hung anteriorly, and was readily surrounded by one of the ordinary clamps used in this operation. He selected it because it was much used by those familiar with this operation, and he had no difficulty in taking hold of and compressing it, to prevent it (the pedicle) from slipping. He took care also to keep it out of the wound; three or four stitches were sufficient to close the latter, so as to unite the parietes. Some surgeons think it advisable to include the peritoneum in the stitches in these cases, but sufficient was done to merely approximate the wound.

We have now to look to the result of the operation. The chance of recovery is more favourable than in other cases because the operation was done without the smallest amount of roughness or exposure, and he could expect nothing to be in the peritoneum, except perhaps blood from the breaking down of the adhesions. The case may be looked upon as one giving a favourable impression of the result of the operation. Experience has taught us that even some of the most eligible cases have not turned out favourably. On the other hand, some bad cases have done well. We will wait patiently, Mr. Fergusson said, in conclusion, to see what nature will do. On examining the sac there were several smaller tumours within, filled with fluid; and no doubt, after repeated tapping, the disease would have assumed the multilocular character, but for all practical purposes it may be looked upon as a single cyst.

We may observe that Mr. Fergusson tapped the cyst with a large trocar and canula, the latter being affixed to a gutta-percha tube reaching to the floor, and which successively filled a number of large basins with a fluid resembling thick pea-soup. In this way the enormous sac was gradually emptied, and finally drawn out, and the intestines were not even exposed. The incision was made simply with a scalpel, and no director was employed. When closed it was about two inches and a half long, a circumstance most favourable towards recovery. There was no escape of fluid about the patient's person, no hæmorrhage, and therefore no sponging, thus rendering the operation one of great cleanliness.

Up to the present time the patient has gone on well, and may be fairly pronounced convalescent, although just three weeks have elapsed since the operation.

SAMARITAN HOSPITAL.

FIVE CASES OF OVARIOTOMY, IN ALL OF WHICH THE RESULT WAS SUCCESSFUL.

(Under the care of Mr. SPENCER WELLS.)

In our "Mirror" of December 20th and 27th, 1862, we published the particulars of 19 cases in which ovariotomy was resorted to. Eleven of these cases occurred in the London Surgical Home, and we gave the results of the whole of the cases of ovariotomy performed in that institution as 31, with recovery in 21, or 10 deaths in 31 cases. Four other of the cases then reported occurred in the Samaritan Hospital, and we now give (from notes by Mr. E. Parson, house-surgeon) the particulars of 5 other cases operated on in the same hospital, adding that the total number of cases in which ovariotomy has been performed in the Samaritan Hospital is 34, and that recovery has taken place in 24, the deaths being 10 in 34 cases. This subject is exciting so much attention just now, both at home and abroad, that the above facts are certain to interest our readers.

CASE 1. *Multilocular ovarian tumour; two tappings; ovariotomy; recovery.*—A. D——, married, aged fifty, was sent to Mr. Wells by Dr. Woodhouse, of Hertford, and first admitted on March 13th, 1862. A multilocular ovarian cyst occupied the abdomen, the girth of which at the umbilicus was forty-one inches. The uterus was pushed over to the left side by a portion of tumour in the pelvis, and was not movable. She was tapped on March 18th and June 23rd, and discharged on the 28th of the latter month. The cyst filled more slowly, the patient improved in health, and she was admitted for the third time on Oct. 13th, 1862. Great doubt was felt as to the closeness of the connexion with the uterus, and it was decided to make an exploratory incision, and be guided by the result. The operation was performed on Nov. 17th, 1862. Dr. Greenhalgh administered chloroform. Dr. Robert Lee and many other visitors were present. Mr. Wells commenced by an incision, between four and five inches long. The abdominal wall was very thin, and the cyst, being covered by a little ascitic fluid, was easily exposed. Some slight parietal adhesions were broken down. A large cyst was tapped, and about twenty pints of fluid withdrawn from it. Finding that the pelvic connexions were not intimate, Mr. Wells separated a very strong adhesion between the upper part of the cyst and the thickened suspensory ligament of the liver. He then opened the large cyst, passed his hand into it, and broke down several inner cysts; the outer one being withdrawn, and the abdominal walls being kept so pressed against it that no ovarian fluid could pass into the peritoneal cavity. After separating a small piece of omentum, the tumour was entirely withdrawn, and the pedicle, which was moderately large, was secured by a clamp. The wound was closed by four deep and several superficial silk sutures. The patient soon rallied, never vomited, had two opiate enemata during the evening on account of pain, and for two or three days was troubled by cough; but she made an excellent recovery, and was discharged in good health on Dec. 10th. Dr. Woodhouse wrote on Feb. 21st: "She continues quite well."

CASE 2.—*Ovariotomy; pulmonary congestion; venesection; recovery.*—E. W——, single, aged seventeen years and two months, admitted Nov. 13th, 1862, with a very large ovarian tumour, dating only from the previous May. She had never been tapped, and was much emaciated. Ovariotomy was performed on November 26th. Mr. Clover gave chloroform. Dr. Kumar, of Vienna, Dr. Berckhardt, of Berlin, and other visitors, were present. An incision was made, four inches long. The cyst adhered closely all over the abdominal wall anteriorly, also around the suspensory ligament of the liver, and in the right iliac fossa. As the cyst was withdrawn, a large piece of omentum was separated from the upper part and was kept outside. The pedicle was secured by a clamp, and the cyst

cut away. As the omentum did not appear to be healthy, and was much torn, Mr. Wells cut away a large piece and tied four vessels, which bled freely, with very fine silk, cutting off the ends close, and then returning the omentum. The wound was closed as usual. The patient soon rallied, and began to perspire. There was a very troublesome suffocating cough, but no pain. Some four to six ounces of blood had oozed from the surface of the pedicle, which did not seem to be perfectly compressed by the clamp, the cough having disturbed it. Mr. Wells cut away some of the stump to find the bleeding vessel, which he tied, and applied perchloride of iron to the rest of the surface. The loss of blood appeared to relieve the chest; and the pulse, though very rapid, was not feeble. She was discharged Dec. 20th, 1860, and has called at the hospital since in very good health.

CASE 3. *Ovariotomy; firm adhesions; recovery.*—E. B——, aged forty-two, married, was admitted Dec. 12th, 1862, with a large multilocular cyst of the left ovary, which had probably existed for several years, but had only increased rapidly since the preceding January. The girth at the umbilicus was forty-three inches, and the distance from symphysis pubis to ensiform cartilage twenty inches. She had never been tapped.

Ovariotomy was performed on December 15th. Mr. Clover gave chloroform. Dr. Acland, Mr. Partridge, Mr. S. Haden, and others, were present. An incision, four inches long, was made. The adhesions were so close that it was not easy to make out the exact limits of the cystic and parietal layers of peritoneum. But Mr. Wells did so after a little careful examination, and separated some firm adhesions as far as one finger would reach. He then tapped. The lower part of the cyst was then easily withdrawn; but the upper part was held by a piece of adhering omentum, about six inches square, which was separated, and then by a very firm band of adhesion, which extended above and to the right of the umbilicus. This was separated, and a long, very narrow pedicle secured by a clamp, and the cyst cut away. The wound was closed by deep and superficial silk sutures.

She rallied well, and was discharged in good health Jan. 7th; and Dr. Acland wrote, on Feb. 20th, to say that she was perfectly well.

CASE 4. *Large multilocular cyst; seventy-two pints of fluid removed by tapping; ovariotomy three weeks after; recovery.*—J. W——, aged thirty-two, married, admitted Dec. 20th, 1862, with a very large ovarian cyst, dating from the birth of her third child, six years before. She had been subject to prolapsus uteri before the confinement, and it became more complete afterwards, being at the time of admission irreducible, and complicated by vaginal cystocele and rectocele. The girth at the umbilicus was fifty-four inches, and the distance from ensiform cartilage to symphysis pubis thirty-six inches; while from one anterior-superior spinous process of the ilium to the other it was forty inches. Mr. Wells tapped her on Dec. 30th, and removed seventy-two pints of clear, highly albuminous fluid. A movable, multilocular cyst remained. The uterus was then easily returned.

Ovariotomy was performed on Jan. 19th. Mr. Clover gave chloroform. The chief sac was tapped, emptied, and withdrawn; but a mass of secondary cysts, as large as a child's head, made it necessary to enlarge the incision. The whole was then easily withdrawn, a short pedicle secured by a clamp, and the wound closed as usual.

She was discharged, in excellent health, on Feb. 17th.

CASE 5. *Ovarian cyst; sixty-nine pints of fluid removed by tapping; ovariotomy; recovery.*—M. W——, aged fifty-six, married, admitted Jan. 17th, 1863, having been sent to Mr. Wells by Dr. Williams, of Rugeley, as a fit case for ovariotomy. She had been married only four years, and had noticed an abdominal swelling on the right side about a year before marriage. The swelling increased, and she was tapped in July, 1861, in June, 1862, and on admission.

Ovariotomy was performed on Feb. 9th, 1863. Mr. Parson administered chloroform. Drs. Williams, of Rugeley; Duke, of Chichester; Hoffmann, of Margate, &c., were present. An incision, four inches long, was made. Extensive and rather firm parietal adhesions were broken down; the cyst tapped, emptied, and withdrawn; the pedicle secured by a clamp, and the cyst cut away. The left ovary was found to be healthy. The wound was closed by deep and superficial silk sutures, after tying three superficial vessels divided in the first incision. The bowels acted on the fifth day after an enema, and from this time she went on perfectly well, only complaining of occasional flatulence. She returned home on March 7th.

ST. MARY'S HOSPITAL.

DEEP PURULENT SINUSES IN THE MAMMA OF FIVE MONTHS' STANDING, CURED IN THIRTEEN DAYS BY SIMPLY PREVENTING THE PLAY OF THE PECTORAL MUSCLE; CLINICAL REMARKS.

(Under the care of Mr. URE.)

H. D——, aged eighteen, a delicate-looking young woman from the country, was admitted Jan. 23rd, 1862, for an affection of the left mamma. The breast was perforated in several places by sinuses, some of which could be traced under the gland, and from which there was a discharge of sero-purulent matter. It felt hard, somewhat fuller than the other, and was the seat of occasional throbbing pain. The nipple was partially obliterated. The complaint commenced about five months previously with abscess, which the patient ascribed to a blow on the part. The catamenia have been regular ever since they set in, a year back. The patient had the advice of a medical practitioner in the country, who recommended poulticing, and eventually her removal to a London hospital. When admitted, she was in a state of nervous trepidation, from a notion her relatives had of the complaint being cancerous.

Mr. Ure, considering that these purulent fistulæ were merely deep seated abscesses, which did not heal owing to the discharge being kept up by a continual slight degree of friction exercised on their sides by the repeated play of the pectoralis major muscle, directed the left arm to be kept steadily bandaged close to the side, with the forearm brought across the chest; the breast itself being simply covered with a piece of lint spread with cerate in order to absorb the discharge. This was done on Jan. 26th. On Feb. 2nd there was already a marked improvement; several of the sinuses were healed, and from one or two that remained there was a very slight secretion. By the 5th the sinuses were all firmly closed. In two days after she returned home to the country with a sound breast.

Mr. Ure, in some clinical remarks, alluded to various plans of treatment which had been resorted to in cases of this description. Mr. Hey's practice was to trace the course of all the sinuses, and lay them open; and he asserted that unless this were done with respect to every one of them the cure could not be accomplished. This treatment, it must be confessed, was severe. Among other measures which have been employed may be enumerated compression, astringent injections, cauterization, and the seton; in failure of such measures, Mr. Lawrence, in his Lectures on Surgery lately published (p. 174), says—"It will be necessary to lay the part open by simple incision. Should the tube be long, one half may be cut at first, and the other after the first incision has healed."

(OPHTHALMIC DEPARTMENT.)

TWO CASES OF EXTRACTION OF MONOCULAR CATARACT; WITH CLINICAL REMARKS.

(Under the care of Mr. ERNEST HART.)

In operating, on the 4th instant, for the extraction of a fully-formed cataract, Mr. Hart observed that some surgeons were of opinion that monocular cataract, when fully formed, should always be removed. The present case was that of a young woman, in whom the cataract had formed, without any very apparent cause, in the left eye, the sight of the right eye remaining good. The patient was young and unmarried; the cataract was a considerable deformity; it altogether abolished sight; monocular vision was insufficient for many purposes of life: he did not hesitate, therefore, to extract. Early extraction had been advised in various cases; and an able foreign writer had brought forward a good deal of evidence and argument to show that the existence of cataract in the one eye tended, by reflex influence on the nutrition of its fellow, to hasten the production of opacity in the corresponding lens.

In the same ward with the patient just operated on, Mr. Hart mentioned that there was another female in whom also he had extracted the lens for monocular opacity, with resulting benefit, and whose case afforded a striking illustration of the activity of the reflex influence. This was a young woman who had been sent for treatment, as having "suddenly become blind." When brought to the hospital she groped about in darkness, and could not avoid even large objects, requiring to be led and directed at every step. On examination, the right eye showed

a lens very opaque, and partially dislocated. The upper part of its suspensory ligament was ruptured, and it moved backward and forward, attached by the lower edge as by a hinge. The iris was paralysed and tremulous; the eyeball very soft. There was perception of light to a limited extent on artificial lateral and oblique illumination being practised. The *left* eye was examined ophthalmoscopically. The cornea was natural, and there were no external signs of inflammation; but the transparent media of the eye were so generally turbid and partially opaque that the fundus could not be fully lighted or diagnostically examined. The history was unusual, and very interesting. Partial blindness had come on suddenly in the *right* eye the day after accouchement, with a sudden pain. On being questioned, she said she had just before struck herself a slight blow over the *left* brow. But this did not seem sufficient to explain the partial dislocation of the right lens. The lens thus partially dislocated had become rapidly opaque, and gradually sight had gone from the left eye. Mr. Hart looked upon this affection of the left eye as being in great measure due to the reflex injury to nutrition caused by the dislocated and partially disorganized state of the right, in which the lens was as a foreign body; and therefore, immediately on the admission of the patient, he proceeded to extract the lens. As the iris was in its upper and outer part lying against the cornea, he made a lower section by penetration at the inner angle, using a Beer's knife mounted on a bent stem, which facilitated that proceeding. The section and extraction were thus effected without wounding the iris. The vitreous humour was very fluid, but comparatively little was suffered to escape. The looked-for effect of the operation upon the opposite eye has been satisfactorily and rapidly developed. How far sight will be restored in the partially disorganized ball from which the dislocated lens was removed is of course doubtful; but in the right eye vision was largely restored, so that on the eighth day the patient could see to feed herself, to move about, and to assist somewhat in the dimly-lighted ophthalmic ward. Mr. Hart observed that, besides the interest which attached to the case as an instance of reflex nervous influence on nutrition, the nature of which Dr. Brown-Séquard had fully exposed in his important physiological works, the origin of the dislocation was worthy of study. Parturient women were apt to fall into a state of weakness in which such rapid failures of nutrition were wont to occur, and he believed that the dislocation was probably spontaneous and due to that cause. Throughout the convalescence from the operation he had treated the patient with full doses of tincture of the sesquichloride of steel, and meat and beer; and he thought that, if the old antiphlogistic system had in any measure been adopted, the patient would probably have been blinded for life in both eyes. Several of the affections of the eye were modified in an interesting manner by parturition and lactation, and their treatment should be similarly altered.

UNIVERSITY COLLEGE HOSPITAL.

INTRA-PELVIC ABSCESS, PRESENTING IN THE GROIN AND EXTENDING DOWN THE THIGH; CLINICAL REMARKS.

(Under the care of Mr. ERICHSEN.)

AN interesting case of pelvic abscess was admitted many months back into the above hospital, which possessed the unusual feature of presenting in the groin. The patient, Anne A——, a housewife, aged thirty-eight, was confined a year and a half before her admission; and some months later an abscess formed in the groin, and gradually extended until it had reached the lower part of the thigh, in its course passing between the femoral vessels. The case was made out to be intra-pelvic abscess, but had been sent into the hospital as one of tumour of the thigh. When examined, the abscess was discovered lying to the inner side of the thigh, upon the adductors, and was the size of a large flattened pear. Mr. Erichsen made an incision (under chloroform) down to the adductor muscles, and pushed a probe into the abscess; a blunt-pointed forceps was then introduced alongside the probe, and on opening the blades a quantity of thin watery pus gushed out—probably a pint or more. In making the incision, Mr. Erichsen kept to the inner side of the saphena vein, and in some clinical remarks, afterwards made, he observed that the muscular structure was over it, and that it frequently happened there was some large vessel which furnished a quantity of blood; oftentimes there was inflammation of the surrounding structures. He had sometimes seen great hæmorrhage from opening such an abscess with a scalpel; and in the present instance it might have been severe if that method had been practised. He recollected an instance in the hospital many years ago, in which a surgeon had opened an abscess in the thigh of a student, whose life was nearly lost from the hæmorrhage which ensued; and it actually became necessary to tie the femoral artery before the bleeding could be arrested. He had, a short time since, seen a suggestion—made, he believed, by Mr. Hilton—for the opening of an abscess, which was well worthy of recollection: it was to expose the muscular covering, and to pass a steel probe through the muscle into the abscess; a dressing forceps could then be passed into it with the probe as a guide, and on dilating the blades the pus would flow out. This suggestion he had, with great facility, adopted in the present instance. He believed that a drainage-tube acted like a seton, and here it was convenient to introduce one, which he did by means of an eyed-probe with the eye cut off, leaving it like a fork, which could be passed into one of the holes of the drainage-tube, and thus readily introduced into the abscess.

The secretion of pus gradually diminished, and the patient left the hospital some weeks later comparatively well.

Provincial Hospital Reports.

BATH UNITED HOSPITAL.

OVARIAN DISEASE.

(Under the care of Dr. COATES and Mr. SODEN.)

MARY ANN R——, aged twenty-five, a lady's-maid, unmarried, residing near Bath, was admitted into the servants' ward Dec. 6th, 1862. She is rather under the middle height, of delicate conformation, having never enjoyed robust health, intelligent, of a happy and placid disposition, and expresses herself as willing to submit to any plan of treatment that can be adopted for her cure or relief. In December, 1861, she had prolapsus uteri, which she attributed to lifting some heavy boxes, and for which she was seen by Mr. Soden, who devised some mechanical support for her relief. In June or July of the following year, she first noticed a swelling in her right side about as large as an orange, which gradually increased in size; but during the last seven weeks it has grown so rapidly, and has encroached so much on the opposite side, that it is almost impossible to say now, so much is the tumour in the centre, from which side of the abdomen the disease had originated. The uterus is rather low down, is tolerably movable, and has its neck slightly deflected to the right side. After a careful examination in consultation, a unilocular cyst, arising from the right ovary and containing a very thin fluid, was diagnosed. As all the functions of the body were acting well, and in the absence of any urgent symptoms, it was determined to keep the case under observation for two or three weeks, and then either to tap and inject the cyst, or remove it altogether.

Jan. 7th, 1863.—A month having elapsed since her admission, and no improvement from medical treatment observed, it was considered that the removal of the tumour would be giving her a better chance of ultimate recovery than the attempt at any palliative measures.

Operation.—The room having been previously prepared and chloroform administered, Mr. Soden made an incision three inches long, from the umbilicus downwards, through the integuments and peritoneum down to the cyst. A trocar and canula were then introduced, and about seven pints of perfectly transparent fluid were drawn off. The cyst was then withdrawn through the opening and held to one side, when most extensive adhesions were discovered in the neighbourhood of the pedicle; and so firmly was the cyst glued to the cæcum, uterus, and pelvic contents, that it was found impossible to remove the whole of it. Two large hare-lip pins were then passed through the upper part of the incision, an inch apart, while the large broad pedicle, composed of the neck of the cyst itself, was brought out of the lower portion of the wound; the latter, having been secured by a double ligature, was cut off, and the stump transfixed by a third pin, the whole being then brought together by the twisted suture. The operation lasted twenty minutes, and not more than an ounce of blood was lost on the occasion. The patient was removed to bed, and an opiate was given as soon as she had recovered from the effects of the chloroform.

Half-past four P.M.: She looks now (four hours after the operation) very pale, though bright and cheerful. She com-

plains of slight pain in the neighbourhood of the wound and the right groin. No sickness; breathing natural; pulse 96. To have twenty minims of Batley's sedative solution every three hours, and beef-tea diet.

Jan. 8th (twenty-four hours after the operation).—She has had scarcely any sleep during the night, and has vomited twice. Countenance anxious; breathing hurried; voice low and weak; pulse 120; tongue brown and dry. She now complains of severe pain in the abdomen. To continue Batley's solution, and to have champagne and ice.

9th.—She is worse in every respect, and evidently sinking. Countenance pinched and deathly pale; pulse 160, and scarcely countable. She expresses herself as free from pain in the absence of the vomiting. She died this evening (sixty hours after the operation).

Autopsy, sixteen hours after death.—The wound was found perfectly united at its upper part; the pedicle in its lower portion was in a sloughy condition. On opening the abdomen, most extensive and almost universal peritonitis was revealed. The small portion of cyst forming the inner part of the pedicle was covered with lymph on its inner surface, while externally it was found strongly adherent to the cæcum, uterus, and abdominal walls. The other abdominal viscera were in a healthy condition. The chest was not examined.

ROYAL INFIRMARY, EDINBURGH.

OPERATIONS PERFORMED BY MR. SPENCE DURING THE MONTH OF FEBRUARY.

THE following list has been furnished by Dr. Arthur G. Reid, resident surgeon at the infirmary:—

Operations.—1. Excision of the shoulder-joint. 2. Primary amputation of the arm. 3. Primary amputation at the wrist-joint. 4. Secondary amputation of the arm for injury of the forearm. 5. Amputations of the thigh (two). 6. Amputation below the knee (primary). 7. Removal of a large fatty tumour from the back.

Minor operations.—1. Removal of a tumour from the palate. 2. Radical cure of hydrocele. 3. Radical cure of fistula in ano. 4. Talipes. 5. Circumcision. 6. Removal of necrosed bone from the tibia. 7. Removal of portions of the tarsus affected with cario-necrosis. 8. Removal of portions of the radius for necrosis following compound fracture. 9. Polypus of the nose. 10. Amputation of the toe. 11. Amputation of the little finger. 12. Removal of necrosed portion of bone from a thigh-stump which had healed up.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

ANNIVERSARY MEETING, MARCH 2ND, 1863.

DR. BARLOW, PRESIDENT.

THE annual general meeting of this Society took place on the 2nd inst., and was attended by a large number of the Fellows. After the ballot for the election of the officers and council for the ensuing year had been declared open, the Treasurer's Report for the year 1862, and the Report of the President and Council were read, from which it appeared that the Society continued in a state of great and increasing prosperity. The total number of Fellows, resident and non-resident, in the last Report was 630, and they now amounted to 642. The total ordinary income was £1343 13*s.* 11*d.*, against an expenditure, ordinary and extraordinary, of £1090 9*s.* 4*d.*, leaving a balance of £253 4*s.* 7*d.*, which, added to a previous balance of £47 0*s.* 2*d.*, and the amount of composition fees in lieu of further subscriptions, £57 15*s.*, gave an entire balance of £357 19*s.* 9*d.* in the hands of the Society's bankers. There had been a loss of six Fellows by death and of four by resignation, and the Society had received an accession of twenty new Fellows, thirteen of whom were resident, and seven non-resident. The Report referred to the excellent results which had followed the appointment of scientific committees by the Society, as shown in the valuable Report of the first Committee on Suspended Animation, and mentioned that the Council had recently appointed a second Committee on the Uses, Effects, and Modes of Administration of Chloroform. The Council considered that the state of the income of the Society appeared to offer a further encouragement to extend as widely as possible the usefulness of the Society, and more particularly the labours of the scientific committees already so auspiciously commenced; by such means increasing the dignity of the Society, and realizing the highest aspirations of the distinguished members of the profession who founded it, and of those who had since watched over and fostered its growth. It was stated in the Librarian's Report that 266 new works (independent of journals and continuations) had been added to the library, and, an increase of room for journals and serials being required, that shelving had been added, capable of containing 1800 additional volumes; also that a new feature had been added to the library, at the suggestion of one of the Fellows, Dr. H. G. Wright, in the shape of portfolios containing photographs of subjects of professional interest. A hope was expressed that Fellows possessing copies of such photographs would present them to the Society.

The adoption of the Report was moved by Dr. Barrows and seconded by Mr. Curling, and on being put from the chair a discussion ensued, in which Dr. Greenhow, Mr. Charles Hawkins, Dr. Barker, Dr. Webster, Mr. Hilton, and Mr. Arnott took part.

Dr. GREENHOW drew attention to what he considered the still imperfect state of the ventilation of the meeting-room, notwithstanding the alterations introduced the year before last, and hoped that further steps would be taken to bring it to that state of perfection which a Society embracing so many Officers of Health amongst its members was entitled to expect.

Mr. CHARLES HAWKINS thought that the only remedy would be the enlargement of the room, which had been proposed at several previous anniversaries of the Society, and for which plans and estimates had already been made.

After some discussion, in which differences of opinion were expressed as to the real financial status of the Society, as shown by the balance-sheet, an amendment was moved by Mr. CHARLES HAWKINS, and seconded by Dr. STEWART,—"That a meeting of the Society should be called on the subject, and that the plans and estimates obtained should be laid before the Society."

The PRESIDENT took the sense of the meeting on the amendment, and declared it to be lost.

After some further remarks, in which the speakers congratulated the Society on its flourishing condition, financial and otherwise, and more particularly on the successful introduction of the appointment of scientific committees, which were considered a most valuable addition to the Society's means of usefulness, the original motion for the adoption of the Report was put and carried.

The PRESIDENT then addressed the meeting, and after a few introductory remarks expressive of his regret at taking leave of his colleagues and of the Society, from whom he had received such courtesy during his term of office, proceeded to a biographical notice of those Fellows who had been removed by death since the last annual meeting. These were six in number: Mr. Eusebius Arthur Lloyd; Dr. George Darling; Mr. Edward Stanley, F.R.S.; Sir Benjamin C. Brodie, Bart.; Mr. Peter Rossey; and Mr. John Gunning. He then alluded to the abortive attempt which had been made at the commencement of his presidentship to effect an amalgamation of the Pathological, the Obstetrical, the Epidemiological, and the Royal Medical and Chirurgical Societies; and stated that, as a substitute for this proposed change, a new function had been bestowed on the Society, in the formation, by its Council, of scientific committees for the investigation of subjects of special interest and importance. He eulogized the report drawn up by the first of these scientific committees, to which was allotted the subject of "Suspended Animation;" and augured favourably of the working of a second committee on "Chloroform," whose labours had just commenced. He characterized the creation of these new functions as a move in the right direction; and indicated two other modes in which, in his opinion, the flourishing state of the funds would permit the Society to promote the object for which it was founded—namely, the advancement of medical and chirurgical knowledge. These were—first, to present medals, under due regulations as to time and value, to professional men who should prove themselves most deserving of such distinctions; and, secondly, to aid by grants persons who needed funds for the publication of valuable works, or the prosecution of useful researches. He also made favourable mention of the suggestion of one of the Fellows of the Society, that a new order—namely, that of Corresponding Foreign Fellows, should be created, and gave reasons why such an order had become necessary. The President stated that the question of either changing altogether the locality of the Society or enlarging the present premises had been under consideration,

but that neither the one proposal nor the other had been approved; that arrangements, however, had been made for the accommodation of more books by putting up new shelves; and that an improved system of ventilating the meeting-room had been adopted. He finally craved permission, ere he took his leave as the oldest President who had ever occupied the chair, to avail himself of his character as a veteran, and advert to the impassioned tone of address which on some rare occasions he had observed speakers to adopt at the meetings, and to recommend that in future discussions those personalities, those ebullitions of emotion, those impugnments of motives, should be avoided, which were so unnecessary and so out of place in the consideration and discussion of scientific questions. After enlarging somewhat on this topic, he concluded by expressing his great satisfaction at being succeeded in office by a gentleman whose high talents and prominent station rendered him so eminently qualified for those important duties which he would be called on to perform.

At the conclusion of the President's address, the proposed new bye-laws relative to the scientific committees were (with a few technical alterations moved in an amendment by Dr. Balfour) adopted. Thanks were then voted to the members of the Scientific Committee on Suspended Animation—namely, Dr. C. J. B. Williams, Dr. Kirkes, Dr. Harley, Dr. B. Sanderson, Dr. Brown-Séquard, Dr. Hyde Salter, Mr. Savory, and Dr. Sieveking—for the able and zealous manner in which they had carried out their investigations; and also to the authorities of University College, the Royal Humane Society, and the Royal National Life-Boat Institution, for their courtesy and assistance in advancing the inquiry. The thanks of the Society were also voted unanimously to the retiring President, for his able conduct in the chair, and for his admirable address; and to Mr. C. H. Moore, Secretary, and the other retiring officers of the Society, for their valuable services during the time they had been in office.

At the conclusion of the meeting, the result of the ballot for officers and council for 1863 was announced by the President as follows:—President: Mr. Partridge.—Vice-Presidents: Dr. Hodgkin, Dr. West, Mr. Hilton, and Mr. Fergusson.—Treasurers: Dr. Pitman and Mr. Dixon.—Secretaries: Dr. Sieveking and Mr. J. Birkett.—Librarians: Dr. Stewart and Mr. Henry Lee.—Other members of Council: Dr. Cotton, Dr. Greame, Dr. G. Johnson, Dr. Markham, Dr. Sibson, Mr. G. V. Ellis, Mr. Barnard Holt, Mr. Holthouse, Mr. E. Newton, and Mr. Toynbee.

MEDICAL SOCIETY OF LONDON.

ON Saturday, the 7th inst., the above Society celebrated its ninetieth anniversary at the Albion Tavern, when the Annual Oration was delivered by Dr. Habershon. The President (Dr. Sibson) then announced the following gentlemen as elected office-bearers for the ensuing year:—President: Mr. Canton.—Vice-Presidents: Dr. J. Bird, Mr. T. Bryant, Dr. Chas. J. Hare, and Mr. G. Lawson.—Treasurer: Mr. C. H. Rogers Harrison.—Librarian: Dr. Palfrey.—Secretaries in Ordinary: Dr. Gibb and Dr. E. Symes Thompson.—Secretary for Foreign Correspondence: Mr. de Méric.—Councillors: Dr. Althaus, Mr. Barwell, Mr. Birkett, Dr. Camps, Dr. Cholmeley, Dr. Andrew Clark, Dr. John Cockle, Mr. T. C. Weeden Cooke, Mr. Coulson, Dr. T. Davidson, Dr. Habershon, Dr. Henry, Mr. Hulke, Dr. John Jephson, Dr. Leared, Mr. H. P. Robarts, Dr. Sibson, Dr. W. Smiles, Dr. J. Sherwood Stocker, and Mr. J. Townley.—Orator: Mr. Henry Thompson.

A large number of the Fellows then dined together, with several visitors and guests. The leading toast of the evening was "The Medical Society of London."

Reviews and Notices of Books.

Illustrations of Dissections, in a Series of Original Coloured Plates, the Size of Life, representing the Dissection of the Human Body. By GEORGE VIEER ELLIS, Professor of Anatomy in University College, London; and G. H. FORD, Esq. Super-royal folio. Parts I. and II. London: Walton and Maberly.

THE design of this work will be recognised by students, by surgeons, and by professors as being highly rational and useful. It presents a view of the parts of the human body as they are seen in dissection, retaining their mutual relations. Thus are combined the desiderata which have been separately sought, on the one hand, by the illustrated views of nerves, arteries, and muscles; and, on the other, by plates of surgical anatomy, in which regional relations are exclusively studied. This series of Illustrations of Dissections supply, in fact, the various advantages offered by the separate works of Maclise and Quain. The practical anatomy may be fully learned by the student who follows the successive layers by which the dissections are conducted, and he will find here reproduced permanently for his study the image of the work which he has to do in the dissecting-room—work which will thus be greatly facilitated, but by no means superseded. The surgeon will also be able to refresh his recollection of the practical anatomical details by reference to the plates; while, from the accuracy with which relations are preserved in each layer, he will find them safe and invaluable guides for his scalpel, whenever he thinks it desirable to scan them before proceeding to remove a deep-seated tumour, to cut down upon a large artery, or otherwise to infringe upon the continuity of the tissues. The first two parts are devoted to the Axilla and Arm. The plates are of the highest order of merit, and are not to be surpassed for accuracy and beauty by any English or continental production of the kind; and the long experience and high attainments of Mr. Ellis as a professor of anatomy have enabled him to select such views, and to accompany them by descriptions so complete, useful, and succinct, that the fasciculi now issued must afford equal satisfaction to the busy surgeon and to the critical anatomist. The price at which they are issued is very moderate; and the honour of our English school of anatomy and surgery is so well supported by this iconographic work—of which there is in our literature, as compared with that of the Continent, a great dearth—that we trust the enterprise of the author and of the publisher will be rewarded by a large sale.

Anatomy of the Parts concerned in Femoral Rupture. By GEORGE W. CALLENDER, Assistant-Surgeon to, and Demonstrator of Anatomy at, St. Bartholomew's Hospital. London: John Churchill and Sons.

THE subject of femoral hernia and the anatomy of the parts concerned in it has been so often and so minutely discussed in monographs almost innumerable, as well as in the classical treatises of general anatomy, that it might be thought well-nigh exhausted. But, in truth, it is of almost inexhaustible interest, and of considerable complexity; so that even at this day there are probably not half a dozen of the best anatomists of Europe perfectly agreed on all points; and if the most accomplished anatomical teacher of each capital of Europe were at this moment set down to produce dissections and descriptions of the parts concerned in femoral hernia, in all probability their preparations and accounts would present considerable points of difference. A main object of this book has been to render a perfectly clear and accurate account of the parts as prepared according to English views, and at the same time to trace back among the older authors the first originals of our present descriptive titles. The literature of femoral hernia is indeed very voluminous; and in analyzing the works of the older anatomists, and restoring to them some of the credit due for their important contributions to this department of practical anatomy, Mr. Callender renders a very acceptable service. This part of his self-imposed task he has performed with uncommon skill and erudition. Such researches are commonly esteemed dry and dull; and, except to the mind warmed by the enthusiasm produced by more than superficial study, there is something peculiarly uninviting in labouring through the imperfect descriptions, strange nomenclature, and obsolete interpretations which make up the pages of anatomists even so distinguished in their day as Oribasius, Bartholinus, Berengarius, Garengeot, Fabricius, Riolan, Albinus, Vesalius, and other of the favourite companions of Mr. Callender's literary hours, even though the gradual progress of anatomical science

be traced in lineal descent from them through the pages of Morgagni, Haller, Scarpa, Gimbernat, Hesselbach, Cloquet, Astley Cooper, Liston, Morton, and Burns. To this labour the author has, however, devoted himself with that erudite ardour which is produced by a thorough appreciation of the inner interest of a subject which is on the crust uninviting. His erudition has not, however, blinded his judgment; and, with excellent good sense, he has kept the text clear of any interpolation, preserving here an even course of concise and accurate description of the anatomy of the part, and embodying all that is collateral in copious foot-notes.

In the course of these notes much is restored to the older writers that had been credited to late writers, and there are few of the more important parts of the description which have not been anticipated by some one or other. Thus at p. 17 (note), the author restores to Mauchart the credit of distinctly describing the *fascia lata* and its adherence to the tendon of the external oblique, of which the surgical importance is considerable in respect to effusions, and to direction and shape of escaped herniæ, &c.; and at p. 30, he shows how accurately the fascia intervening between the peritoneum and muscular walls of the abdomen has been described by early writers: so venerable an authority as Oribasius correctly detailing its arrangement above where it adheres to its muscles, and below where it leaves the muscles, *καὶ φαίνεται λεπτὸν ἐκεῖνο μόνον γιγνόν*. Several of the older writers (including Vidius and Cheselden) carefully described this fascia; and Astley Cooper *re-described* it, dividing it into two parts, under the title of transversalis and iliac fascia. Mr. Callender prefers the simpler, though old-fashioned, title of subperitoneal fascia, and preserves that title, and with it embalms the fame of the older anatomists.

The anatomical views of Mr. Callender are not without features of novelty, derived from experiment and research. The diagram Fig. 3, Plate IV., may be referred to with advantage, as affording an exact explanation of the manner and extent to which intestine may be protruded in a hernia without elongation of the mesenteric ligament, and the anatomical relations by which more extensive protrusion is favoured on the right side than the left. The measurements illustrated in Plate I., showing the varying height of the pubic spine, and the influence of this variation on the capacity of the femoro-abdominal aperture, are new and important. In the second plate, the author honestly shows the true anatomy of the fascia lata if fairly dissected, without attempting to fulfil laboured descriptions. As a consequence, the saphenous opening with its falciform edge, often so beautifully defined with the aid of a sharp scalpel, disappears. Mr. Callender truly says, that there is no saphenous opening as it has been described in books, and as commonly treated by the scalpel of routine anatomists to correspond to the classical descriptions. Herein he is borne out by the most accomplished anatomists; and, indeed, anyone may on the dead body satisfy himself of the truth of that statement, or if he have not the time and patience to make the dissection, doubtless Mr. Callender will be happy to show him the dissection from which this drawing was taken, which so well represents the truth. The splendid series of preparations illustrative of the anatomy of this part, which were made by M. Deville when lecturing at the Grosvenor-place School,—preparations unequalled for their accuracy and beauty, and of which a great part were presented to the College of Surgeons of England,—have, we believe, perished through some defect in the fluid in which they were immersed.

Some collateral surgical observations are scattered through the notes; and from a table of the operations for strangulated hernia at St. Bartholomew's Hospital from 1852 to 1856, it appears that the author considers the question of opening the sac or not as secondary to that of careful application of the taxis and *early recourse to the operation*. This view is strongly supported by the general experience of hospital surgeons, and finds confirmation from the following summary of the St. Bartholomew's tables:—

Recovered	Sac opened, ... 14	Taxis, ... 4	...	Average strangulation,	21 hrs.
		No taxis, 10	...	" "	30 "
	Sac not opened, 25	Taxis, ... 6	...	" "	"
		No taxis, 19	...	" "	11 "
Died ...	Sac opened, ... 21	Taxis in all	...	Average strangulation,	73 hrs.
	Sac not opened, 13	Taxis, ... 9	...	" "	120 "
		No taxis, 4	...	" "	60 "

We doubt whether the seat of stricture in femoral hernia is ever at the oft-quoted and classical site of Gimbernat's ligament, and apparently, although his utterance is somewhat doubtful, Mr. Callender is also of this opinion.

Medical Psychology; comprising a brief Exposition of the leading Phenomena of the Mental States, and of the Nervous Apparatus through which they are manifested, with a View to the better Understanding and Elucidation of the Mental Phenomena or Symptoms of Disease. By ROBERT DUNN, F.R.C.S.E. pp. 87. London: Churchill and Sons.

THE greater portion of these pages have already appeared in a contemporary journal. They are few in number, it is true; but they are of sterling quality. Every page is suggestive, and displays the close and vigorous thinking of a well-disciplined and philosophic mind. If the profession of medicine in this country would like to know where is to be found an intellect of no common force, and a modesty not too frequently met with, let them look upon the author of "Medical Psychology." We wish we could always be represented by such a man as Robert Dunn.

The Intellectual Observer: a Review of Natural History, Microscopical Research, and Recreative Science. February, 1863.

THE present number is the first of the third volume, and contains several papers of interest: one "On English Beetles and their Relations in the Tropics;" another "On Objects illustrative of Roman Professions and Trades, discovered in the Excavations at Wroxeter;" and a third "On Protean Animalcules." All are illustrated by plain and coloured engravings.

MEDICAL PHOTOGRAPHS AND PORTRAITS.

To the Editor of THE LANCET.

SIR,—One of the signs of progress of the Royal Medical and Chirurgical Society was the announcement at the annual meeting that a collection of photographs of disease had been commenced. I think this advance might be still improved by commencing a collection of engravings of medical men. Everybody has some that might be presented. In time a very valuable collection would be in the possession of the Society. There have been several such collections formed by private individuals, but unfortunately after a time they get out of the public sight. Should the Fellows ever have courage to build rooms worthy of the Society, in which the profession might occasionally meet, a fine collection of professional portraits (which some industrious secretary might illustrate with autographs, &c.) would form an interesting part of such *réunions*.

During the Exhibition of last year, one of the most interesting sights was a collection of portraits of eminent men, so illustrated, exhibited in the rooms of the Law Society in Chancery-lane.

Perhaps you would allow a line more on a subject not quite foreign to the one I have ventured to write to you upon. The alterations at Chelsea Hospital have disclosed the tomb of Cheselden, who was surgeon to the hospital. It is rapidly going to decay; and, if not looked to, in a few years it will be impossible to make out the inscription. Surely the authorities of the hospital would, if asked, put the tomb into repair; if not, I think there would be no difficulty in collecting a few pounds among the profession for so laudable a purpose. Next to Cheselden lies Sir Everard Home, also surgeon to the hospital; over his remains there is simply a flat stone with his name on it. *Sic transit gloria mundi.*

I am, Sir, your obedient servant,

Savile-row, March, 1863. CHAS. HAWKINS, F.R.C.S.

FRENCH MEDICAL STUDENTS.—Several medical students are now leaving Paris, in order to attend upon the wounded patriots of Poland.

THE LANCET.

LONDON: SATURDAY, MARCH 14, 1863.

THE events of the past week are now matters of history. When we of this generation are forgotten, some future MACAULAY may find in their recital materials for the happiest inspiration. Those who participate in great occurrences seldom adequately estimate their significance. Individual feeling enters so largely into all popular demonstrations that inattentive observers are apt to confound persons with principles, and to appreciate according to their separate experience the value or importance of popular favour. We know as a fact, that public spectacles, arranged with all the pomp within imperial resources, are capable of attracting millions to their presence whose ephemeral fervour ends with the occasion. Recent occurrences have shown that national demonstrations are not always the reflections of a national joy, but at times the indication of a political necessity. Therefore it is that, now especially, the festivities we have witnessed proclaim their signification in language more powerful than words. While nations friendly to us are either rent by civil discords or distracted by foreign war, we, who possess the priceless blessing of a free constitution, make common cause of rejoicing in the anticipated happiness of the heir to that crown under which it is our pride and privilege to live. The universal blessings which hallowed our welcome of a fair young stranger to her future home implied more than the exuberant greeting of an enthusiastic people. Past happiness and future hope found therein a simultaneous expression. For a quarter of a century we have recognised the presence of a sovereign whose bright example has exercised the happiest influence on every British home. To her and to her virtues the heart of the nation has long been entirely devoted. Among the millions who did homage to her son and the daughter of her approval, no higher or holier wish was found than that the bright example of our righteous Queen and the memory of her princely Consort might guide and influence those young minds whom Providence in all earthly matters has so signally favoured.

For the members of the medical profession an event fraught with such immense importance to our social system has almost a personal interest. We who can lift the veil of domestic life from almost every hearth, who witness the bitterness and know the sorrows from which rank and station are not exempt, can more closely estimate the advantages likely to follow from the happy union of a Prince whose example and countenance the youthful nobility of England will do well to follow and possess. Though great positions involve great responsibilities, the English nation has learned from the bright example of their Queen that purity of principle can supply the experience of years. The very youth of the illustrious pair will constitute their best protection against those follies and dangers of which they might otherwise have been informed. Guarded by the unceasing care of a devoted people, every act will be sure to receive the kindest and most generous interpretation. Each event which continues to realize the confidence so affectionately given will be cherished and remembered as a perpetuation of that gentle spirit whose royal sympathy has so often to her subjects brought happiness and consolation.

We do from this marriage anticipate special results. A higher and more exalted estimate of the relations of social life on the part of many who fritter away youth and wealth in frivolity and excess; a truer appreciation of the advantages of early alliances as the foundation of domestic happiness; a purer standard for imitation than that afforded by a *blasé* reputation; a more distinct recognition of all that is bright and beautiful in the character of English homes, which it is within the power of our young Prince by his example to illustrate,—cannot fail to render society, and London society especially, the guardians and promoters of every scheme having as its object the well-being and right guidance of the community. We can only add our heartfelt and earnest wishes that it may be so; and fervently hope that every blessing will follow that union in the celebration of which the whole empire has participated, with a warmth of feeling and an *abandon* that no other event in recent times has called forth.

WE publish to-day the first of a series of twelve lectures by Professor HUXLEY on the Vertebrate Skeleton, which will deserve the best attention of anatomists and of all those practitioners who, from their early studies of human or of comparative anatomy, have learned to watch with interest the progress of the science which scans the architecture and traces the design of the animal frame. Medical men have always been foremost among the cultivators of natural science, and by the nature of their calling are usually fitted to advance, as they are disposed to appreciate, anatomical inquiries.

It is greatly to the honour of the College of Surgeons, and redounds much to the fame of our profession and of our country, that from the Hunterian chair of that College have been enunciated by their authors the theories and observations that have most influenced the progress of European science in the direction of anatomical study. The impulse which HUNTER himself gave to anatomical and physiological science was quickened, intensified, and developed into a grand wave of onward rolling genius by the illustrious OWEN. Minor luminaries have shed their brilliancy on the scene, and much was done for histology by the lamented QUEKETT—poor QUEKETT! whose shade Mr. GULLIVER recently summoned to become the mouthpiece of calumnies which he has shrunk from defending. The fame which OWEN gave to the Hunterian chair of Anatomy and Physiology HUXLEY is well capable of maintaining. Belonging to a new school of anatomists and zoologists, of which in this country he may claim the headship,—critical, keen, and inquiring,—HUXLEY and his fellow-workers are doing much to promote the advancement of science. Sceptical of theories and unbending to authority, sometimes harshly disregardful of the services rendered by the most illustrious patriarchs of their science, it is part of their mission to destroy as well as to construct, and many of the "idols of the cave" totter beneath their vigorous blows. Although Mr. GULLIVER was gravely telling his listeners the other day that with HUNTER, HEWSON, himself, and a few English friends the race of physiologists had died out—and that KÖLLIKER, HASSE, HENLE, WAGNER, and the rest were very small fry indeed, albeit some people followed a fashion in speaking highly of them,—it will be seen in the course of these lectures that in anatomy as in histology our most active English workers are progressing in unison with

the Germans; and that HUXLEY's labours go hand in hand with those of JOH. MÜLLER, REMAK, REICHERT, HALLMANN, and RATHKE—obscure individuals, of whom Mr. GULLIVER may not have heard, but who have nevertheless contributed in the most important degree to the science of anatomy.

The views which Professor HUXLEY holds concerning the vertebrate skeleton, and of which the development is to be looked for in the course of lectures which we commence in our present number, differ in many important respects from those which Professor OWEN had rendered world-famous. The archetypal theories of the skull and vertebral column, to which OWEN devoted his grand powers of mind and inexhaustible capacity for labour, were founded upon the comparison of those parts in creatures ranging through the whole scale of the vertebrate kingdom; thus determining gradations, and marking the gradual metamorphosis of elements and transition of forms—one melting into the other, and all referable to the same type. From this observation Professor OWEN concluded, not only that limbs are merely modified vertebral appendages—that vertebral homologies run through all creation,—but that the plan of the skull is identical with that of the vertebral column. HUXLEY, following in the path of GOODSIR, RATHKE, and others, reviving their views and bringing to this subject great powers of mind and vast information, has relied greatly on another method of investigation—that of tracing back the skull and vertebral column to their earliest embryonic states, and determining the identity of parts by their developmental relations. From these researches HUXLEY has been led to the conclusion that the doctrine of the vertebral composition of the skull is not proven, and that the relation of the skull to the spinal column is quite different from that of one part of the vertebral column to another.

This conclusion will be supported in the course of lectures to which we draw attention; and those who have watched the course of anatomical research during the last twenty years, as well as all who wish to learn the latest views of one of the best anatomists in Europe, will follow with interest the discourses in which the lecturer defines the value, while he attacks our previous notions of the morphological relations of the mastoid bone; of the nasal bones (which he declares to be not neurapophyses); of the bronchial arches, which he equalizes with the hyoid, and the latter with the mandibular arc; of the premaxilla, which he places as totally distinct from the palatomaxillar arcade; and so through the skeleton.

A RECENT case of death from suffocation in the close and poisonous atmosphere of an overcrowded closet—called by courtesy a bedroom—afforded us an opportunity of urging upon the public the necessity which exists for some improvement in the construction of labourers' cottages. Nothing is so good as what is called a "striking example," and certainly the suffocation of a strong hearty labourer by the reeking air of his sleeping den—for it could be called nothing less—may be said to have been a forcible illustration of error somewhere. The fame of it, indeed, has spread across the Border. The *North British Agriculturist* is using it as a rod for Scottish social reformers. It remarks:—"Let it once be definitely understood that public opinion demands a better description of housing for labourers, and by a judicious combination of the owners and occupiers of land these obnoxious dwellings will be superseded by comfortable, commodious, and healthy cottages. Hitherto the apathy of all classes directly interested—landowner, farmer, labourer—in the importance of suitable dwellings may palliate, but cannot excuse, the neglect of many of the landowners in Great Britain in their duties regarding the housing of those required to cultivate their estates. A limited number of landed proprietors have combated manfully with the difficulty. The late Duke of BEDFORD is the most notable example in England, and the Duke of BUCCLEUCH in Scotland. To arouse public attention to the enormous evils which result to society from the insufficient house accommodation in dwellings occupied by the labouring classes, alike in rural and urban districts, a Parliamentary inquiry is apparently necessary; as hitherto neither lectures, public meetings, nor the press have awakened the influential members of the community to their responsibilities in reference to the housing of the labouring classes."

At a *conversazione* which was held about a fortnight ago by the National Club at No. 1, Whitehall-gardens, the subject of the "Social and Sanitary Economy of the Dwellings of the Poor" was discussed, under the presidency of the Bishop of London. Sir HARRY VERNEY, M.P., introduced the question; and while urging the vast importance to the poor themselves of proper habitations, he asserted, from facts in his own experience, that landowners were also in every way gainers by improving the dwellings of those whom they employed. The whole question was afterwards discussed by Lords EBURY and SHAFTESBURY, Messrs. KINNAIRD, COLQUHOUN, CHADWICK, Dr. LANKESTER, and others.

With every desire for the labourers of our rural districts to have more wholesome and more comfortable dwellings to inhabit than they have at present, it must not be forgotten that the denizens of our great towns, and of London in particular, are, many of them, living under conditions which far outstrip in wretchedness those of their agricultural brethren. Let the cottages of the latter be damp, dark, and ill-ventilated, their inmates have only to step outside and follow their duties, and a few minutes' walk will take them into the woods and fields. But let the dens and sties of Whitechapel and St. Giles's be ever so repulsive, those who have to endure them can scarcely hope, by any arrangement, to escape them but by losing their day's labour. If the intellectual stolidity of HODGE, with his wife and six children and 15*s.* a week, and who is found pigging it under some thatch in the country, be not a desirable specimen from Arcadia, how must the horrible obtuseness to morality and to the common decencies of life shown by many of our London "costers" be regarded?

Before us is a valuable series of Reports, compiled by Mr. LIDDLE, the Medical Officer of Health for Whitechapel. The account they afford of the dwellings of the London poor in the latter district, whilst truthful and pregnant with teaching, is disheartening in the extreme. Why do not some of our friends who have "missions" turn their hands to work here? They may depend upon it their labours would return a far better harvest than any tilling of the barren soil of "Female Medical Colleges," "Homœopathic Hospitals," and such like delusions ever will. Do they want to be spurred to their work? or are they doubtful as to its necessity? If either, let them spend an hour some evening over Mr. LIDDLE's reports, and it is not unlikely, if they be earnest in their work, that they will start upon it early the next morning. Let us take Tewkabury-

buildings, a place chiefly occupied by foreign Jews. It was found that all the basements, or underground kitchens, were used as dwellings and sleeping apartments, as many as four beds being in one room. The waterclosets, which are in the areas and close to the doors of these rooms, were in a filthy condition, the smell from them pervading the whole house. In one of these rooms was discovered a female lunatic, having neither bed nor bedding, her only covering being filthy rags. Whilst pigs exist in some rooms, human mortality rots in others, information being given at the Inspector's office that a dead body had been kept for ten days in a room in Buckle-street. On visiting the houses in low neighbourhoods, it is by no means an unfrequent occurrence to find an adult brother and sister, a father and an adult daughter, a mother and an adult son, occupying the same bed! Well may Mr. LIDDLE ask, What good citizenship can be expected to be manifested by a class in whom the moral feeling is so low? In that delightful region, "Spratt's-alley," the inhabitants appear to lie like sprats. In a house therein situate, consisting of two rooms, the father, mother, and a daughter of twenty years of age slept in one bed, two grown up sons in another bed, and a child in a third bed, all in one room. The room, being only 12 × 11 × 8 feet, or giving but 176 cubic feet to each person, is not only thus indecently occupied as a sleeping room by the whole family, but is at the same time greatly overcrowded. In a room in Windmill-court there slept the mother, two adult daughters, and two adult sons. In another room in the same court were a man, his wife, the daughter (aged sixteen), and three adult sons. In a room in Swan-court, having only one window, seven persons slept—viz., a man and his wife, the daughter (aged twenty-four, who was in a consumption and lying in bed), and four young children. The cubic contents of this room were 910 feet, which allowed to each person only 130 cubic feet. In a room in Pool-place slept two adult males, two adult females, and three children; and the Inspector remarks that in this room at the time of his visit there were a number of men, women, and children who were to sleep there at night, and to go "hopping" upon the following morning. A serious evil is that where such indecently occupied and overcrowded rooms are rented by one family and lodgers not permitted, no steps can be taken to prevent the occupation, and any expostulation with persons of the class in question we are told "is generally treated with ridicule."

Again we ask men and women with social and philanthropic "missions"—Where are you? Surely here is work for your hands. But do the Whitechapel alleys and the sties of St. Giles lie out of your paths? Well, there is scope for you elsewhere—even (and we are ashamed to confess it) closer to home. At the Staffordshire sessions lately, a letter from the high sheriff of the county was read, stating that the three judges who had sat in the Crown Court during the last year complained of its bad ventilation. On one of the days of the last assizes, the judge had to leave the court for fresh air, and the sheriff had soon to follow him. It is not the poor alone, then, who clamour for reform in this respect.

Whilst upon this subject of the need for fresh air, we may add also that, according to the *Builder*, it is to be feared that sufficient care is not taken to ventilate the sewing schools lately established in Lancashire. A stranger going into some of them in which two or three hundred and upwards of women and young girls have been confined for several hours, would be surprised at the polluted state of the atmosphere. Now this matter requires immediate attention, and during the months which are to come fresh air will be as necessitously demanded as fresh food. There is no lack of work, then, for social reformers.

Medical Annotations.

"Ne quid nimis."

OVARIOTOMY.

THANKS in no small measure to the indefatigable and restless opposition of Dr. Robert Lee, ovariotomy, which had for some time been one of the most successful and important of great operations, has also become the most illustrious and renowned. Opposition is the touchstone of truth; and the repeated onslaughts of Dr. Robert Lee have in each case brought down statistics so full and triumphant from Tyler Smith, Baker Brown, Clay, Wells, and others, that the case in favour of the operation has long since been thoroughly established. Here is a disease hopeless, fatal, and remorseless—held till lately to be incurable and deadly: on the other hand, an operation which Mr. Baker Brown has performed fifty-three times during the last twelve years with twenty-nine recoveries, the improvements in the operation being so great that of the last thirty-one operations, there have been only ten deaths. Dr. Tyler Smith has performed it recently in fifteen cases, of which twelve have recovered. Mr. Spencer Wells has operated in fifty-five cases, with thirty-seven recoveries; and of his last twenty cases, eighteen recovered. It is astonishing that any voice should be raised to carp at an operation which has been practised with results so triumphant. To ask the Medico-Chirurgical Society for a verdict for or against the operation is a mere farce. Nothing which the Society in its official capacity could say on the one side or the other would in the least degree affect it. It is not likely that anyone would be prevented from practising the operation in a promising and well-selected case, supposing that an adverse verdict could by any means be obtained; nor can we think that any timid soul is waiting for an official declaration of this Society before making up his mind to recommend or perform ovariotomy. There stand the facts: independent discussion may shake them; skilful analysis may affect their authority, although all attempts have hitherto signally failed; but every man is competent to judge of their value and bearing,—as competent individually as he would be officially; and not all the votes of all the societies that ever held a charter from Government could affect a scientific series of facts so elaborately sustained. It is as idle to ask for a vote of confidence in such a case, as for a vote of censure.

Some disappointment was expressed in the course of the recent debate, that of the many hospital surgeons present so few took any part in the discussion. On the other hand, it is becoming evident that surgeons are not without some feeling of pique at seeing a great operation taken out of their hands. Dr. Clay, Mr. Baker Brown, and Dr. Tyler Smith are obstetricians; and although our hospital surgeons have recently performed a few isolated operations, they have had but a small number of cases, and their success has not been equal hitherto to that of their obstetric brethren. Some doubts have been expressed as to the propriety of obstetricians taking in hand a surgical procedure of so much importance as ovariotomy. These we do not share. It seems evident that an obstetric practitioner armed with a surgical diploma is as well fitted legally as he is scientifically for dealing with this particular affection of the appendages of the womb—medically if he can, surgically if he think it necessary; and it is clearly as much within the province of the obstetric practitioner to practise ovariotomy

through the walls of the abdomen, if he conscientiously feel equal to the difficult and dangerous task, as to remove a polypus of the uterus per vaginam. It is one of the cases in which the indivisible unity of medicine and surgery loudly asserts itself. Diseases of the ovary are the especial province of the obstetrician; and there are certain points of diagnosis which cannot be solved except by the application of obstetric science. Should a surgeon be called in to such a case, he can of course either apply such information as he possesses to the solution of the problems presented, or he may call in the aid of the diagnostic skill of an accomplished obstetrician, and proceed to operate, fortified by his opinion. The same twofold course is open to the obstetric practitioner: he may stop at the diagnosis and medical treatment, or, if he think himself well able to meet the difficulties and emergencies of such an operation, he may proceed to remove the ovarian tumour which he has diagnosed. It is right to observe that clear diagnosis assumes every day a more important part in the treatment: the elements of judgment as to the unilocular or multiple character of the tumour, its simple or malignant nature, and the extent of its adhesions, are not yet fully obtained. All may usefully contribute towards this end, and mere jealousies as to the diploma of the operator may well be stifled in their birth.

GOVERNMENT OF HOSPITALS.

THE question has been agitated recently at St. Mary's Hospital, Paddington, as to which was the best form of management for the institution. The present government is by an open weekly board, at which all governors are entitled to attend and vote; with standing committees for house, finance, building, and other executive matters. Two other forms have been under discussion: government by a close board or weekly committee, elected by the governors annually, and to which no honorary officers should be eligible,—the medical officers constituting a medical committee apart from the weekly managing committee; or the medical officers to be represented by a certain proportion of their number on the weekly managing committee. The three propositions have been carefully considered at two general meetings of the governors, attended by very large numbers of the influential proprietary of this hospital. The decision finally arrived at by an overwhelming majority has been to retain the present open form of government. It would be unwise and unjust to assume that propositions for introducing a close form of lay government for public hospitals are of necessity founded upon motives of class jealousy, or from a narrow desire of power on the part of the few individuals who are always at the bottom of movements of this character. There are undoubtedly many reasons which are sufficiently plausible on the face of them to influence the minds of a number of persons who judge of hospitals by what is known of commercial companies. It is a maxim in trade that great undertakings cannot be carried on successfully when the proprietary are always interfering; and almost without exception such societies are ruled by annually elected boards.

Public charitable institutions cannot, however, judiciously be placed in a parallel with commercial societies instituted for gain. Here, decisions must be prompt and must be secret. To take all the world into council at every proposed stroke of business would infallibly ruin any such company; and the countervailing disadvantages of jobbery and over-expenditure which are inherent in close boards are overbalanced by the paramount weight of other purely pecuniary considerations. But in hospitals, nothing should be concealed from the public view: the work is one in which all may take a part: publicity is the source of prosperity and the corrective of abuse. The history of St. Mary's Hospital has been a striking instance of the value of an open constitution. In the course of but few years it has rapidly risen into a foremost place amongst metropolitan hospitals. Young and unendowed, it has attained a subscription list with one exception larger than that of any similar institution in London; and has reached a position in every way remarkable, considering that it is unendowed, with unexampled rapidity. The hospital and school are in a most flourishing condition; and this career has been fostered by the open method of government, which invites everyone who is moved to assist in the good work to take his place at the board and help.

THE PROPOSED MARKET IN LEICESTER-SQUARE.

RAILWAY stations, filling up the open spaces of the metropolis, are not the only evils with which we are menaced. Injurious as these may be to the health of the inhabitants, a worse evil is threatened in at least one important part of London. A Bill is now before Parliament which proposes to occupy Leicester-square and the neighbourhood as a general market for fish, meat, and vegetables. The area is to be filled with a number of small shops, and not a single yard of ground left for recreation. It is scarcely possible to believe, in the face of the Public Gardens Bill which has just passed the House of Lords, that so offensive a measure can be carried. Strenuous exertions are, however, being made in its favour. It is opposed by the inhabitants of the district, by the vestries of three important parishes immediately interested, and by the Metropolitan Board of Works. Leaving out of the question the annoyance and nuisance which such a market would necessarily cause to the neighbourhood, it is simply absurd to regard it as a necessity. Within half a furlong of Leicester-square there is already a general market which languishes for support, and is daily becoming more desolate. Newport market, to which we allude, formerly so important and flourishing, has dwindled down to a few butchers' and other shops. If a good market be really a necessity to the neighbourhood, here is a fine opportunity for philanthropic schemers to so improve and extend it that their object may be attained at little cost and with great advantage to the locality. Slaughterhouses, dilapidated buildings all but useless, and other nuisances, might be removed. Numberless complaints were made, and on good grounds, against the ugly building called the "Great Globe" which lately occupied the garden enclosure of Leicester-square; but this, disagreeable and offensive as it was, was nothing in comparison with the proposed market. The "Great Globe is dissolved," and there is an appearance of the formation of a very pretty garden-ground; the ornamental statue, moreover, which had been buried for ten years, has again resumed its site.

We understand that Lord Derby has expressed his determination to prevent, if possible, the promoters of the market from carrying out their project. It is highly important that the system of attempting to encroach upon the open spaces in crowded neighbourhoods should at once be checked. If it be allowed to make way, where would it stop? Precedents in such matters are always dangerous; and it is the duty of those interested in the protection of the public interest, and of the health of the community, to resist by every means in their power such innovations.

We call attention to this subject, and urge it upon the Legislature, entirely on public grounds; but more particularly from the fact that the Bill has passed a second reading in the House of Commons with scarcely a single comment from our political contemporaries. The Bill is now in committee, and is met by the opposition of the authorities we have before mentioned, which we cannot believe it will be in the power of its promoters to overcome. The Metropolitan Board of Works, which involves an immense amount of taxation upon the metropolis, was established for the purpose of effecting something more than the formation of new streets and an efficient system of drainage for London. It has lately acquired the confidence of the ratepayers and the public at large by its decisive prompt-

nen in throwing out the absurd and ruinous Regent-circus Railway Bill in the House of Commons. If it be equally prompt and decided in its opposition to the Leicester-square Market Bill, it will establish another claim to the confidence of its constituents.

UNRECOGNISED INSANITY.

THE case of Charles Fooks, farmer, convicted of the wilful murder of his cousin, Daniel Stone, deserves the solemn consideration of those who have power to commute the sentence, as of all who can influence those authorities. To carry out the sentence of death would be to accomplish a cruel judicial murder. If ever any man suffered under disease of the brain; if ever any man acted under an insane impulse; if ever any man was so afflicted as to be deprived of reason and responsibility in committing a horrible act of causeless violence,—that man is Charles Fooks. The verdict of the jury is unaccountable to the mind of any medical man who reads the evidence. There is, first, the most accurate, circumstantial, and characteristic statement of Martha Hallett, who testified to a chain of circumstances and sayings which constitute in themselves a good clinical portraiture of a phase of disease of the brain. The Lord Chancellor, indeed, recently declared that madness was not a disease, but a fact: nevertheless, those who study rather in the book of nature than in the speeches of Lord Chancellors will continue to believe, what everyone may see, that madness is not the less a disease because it is a fact; and that that which commences as a disease of the brain, ends in the legal "fact" insanity, without ceasing to be a disease. The nervousness, the pains in the head, the wild fancies that people were speaking ill of him, the tendency to "kill," the incessant prating about killing, the delusion that his dependants were in league with his supposed enemies, which frightened his niece from the house, were but the signs of that obscure disease of the brain of which Dr. Winslow has drawn so vivid a delineation from his experience, and of which the neglect led in this case, as in many others, to terrible and fatal results. The corroborative testimony of other witnesses was of the strongest kind. Dr. Harrington Tuke especially gave his evidence, as an expert, with a careful deliberation and earnest thoughtfulness which are worthy of all praise; and his statement, that he believed, on his oath, that the prisoner was acting under an uncontrollable impulse when he fired the gun, deserves the fullest attention. It will accord with the impression which the majority of medical practitioners must receive from the evidence. To hang this unhappy man, under such circumstances, would be an act of horrible and senseless cruelty, from which science and common sense alike revolt. It is earnestly to be hoped that the evidence of insanity will be thrown into such a shape, and so pressed upon the attention of the Home Secretary, as to procure a respite.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

PROFESSOR HUXLEY'S LECTURES.

LECTURE VII.

PROFESSOR HUXLEY said that in his last lecture he pointed out how the classes of the animal kingdom are grouped together, and as it was not possible, from want of time, to enter into the classification of each separate group, he would endeavour in this lecture to give the classification of that very important group, Mammalia.

Many classifications have been made of these animals, but only those proposed within the last forty years have any real scientific value. The first important step was made by De Blainville in 1816, who divided mammals, according to the characters of their reproductive organs, especially the female, into Ornithodelphia, Didelphia, and Monodelphia. He did not, however, define accurately these groups, but he has the great merit of having laid the foundation for a natural division of Mammalia. His Ornithodelphia contained the Cuvierian Monotremata, (Ornithorynchus and Echidna,) having the angle of the jaw not inflected, very large coracoids connected with the sternum, and marsupial bones. In the female the two great oviducts open into a canal common to the urinary apparatus and the two uteri, all opening through the rectum into a cloaca. The vasa deferentia in the male open in the cloacal passage, not being directly continuous with the urethra; and the homologue of the urinary bladder, as in reptiles, does not receive the ureters. In the brain, the corpus callosum is not well defined, but to what extent is uncertain. As to the existence or non-existence of a placenta connecting the fœtus with the parent we are altogether in the dark. Didelphia have the angle of the jaw bent inwards, two successive series of teeth, the coracoids not connected with the sternum; they have marsupial bones, two uteri, and two vaginæ distinct from the urinary canal, and not opening into a cloaca. It appears that the fœtus has no definite placenta; the umbilical vesicle is very large; the corpus callosum rudimentary. Monodelphia have the jaw not inflected; no true marsupial bones (rudiments of them may, however, exist). The vagina is a single tube, and the cavity of the urethra is, as in Didelphia, continuous with the vasa deferentia. A corpus callosum always exists. The young are always united to the mother by a placenta. Thus it is quite evident that Monodelphia are as distinct from Didelphia as these are from Ornithodelphia, who approach the Reptilian type. The two last have been united as Implacentalia, the Monodelphia constituting the Placentalia; but Professor Huxley said that De Blainville's divisions were the most natural, and will remain always the same whatever be the progress of science.

The battle-ground of classification is now confined to the orders of Monodelphia. Some will not admit the order of Toxodontia; by others the Primates are divided into Quadrumana and Bimana; again, others unite Sirenia and Cetacea. But it is useless to enter upon this ground, and we must ascertain how these orders may be arranged, by clear and definite characters, into larger divisions. The earliest attempts at this were made by Sir Everard Home, but his definitions were very rough, and are not worth mentioning. He spoke of the characters of the placenta in different mammals. The next step was taken by Mr. Waterhouse, who was struck by the form of the brain in Mammalia, and divided the Monodelphia or Placentalia into two groups.

PLACENTAL MAMMALIA.

I. Those possessing a smooth brain. (Waterhouse.)

Lissencephala (Owen)
- Cheiroptera.
- Insectivora.
- Rodentia.
- Edentata, or Bruta.

II. Those having a convoluted brain. (Waterhouse.)

Gyrencephala (Owen)
- Quadrumana.
- Carnivora.
- Cetacea.
- Proboscidea.
- Peristodactyla.
- Artiodactyla.
- Sirenia.

Archencephala (Owen) ...Homo.

Mr. Waterhouse does not, however, mention Man. After that, in 1844, Milne-Edwards proposed another classification, based on the characters of the placenta, having, however, nothing to do with Sir Everard Home's. He pointed out four, or rather three, different forms of placentæ. In the first the villi are scattered over the chorion; the second form has these united in knobs (cotyledons.) The first is a *diffuse* placenta; the second a *cotyledonary* one; but in reality they are the same form modified. In the third kind the villi form a ring round the ovum, constituting a *zonary* or *zonular* placenta; and lastly, in the fourth it is cake-like, and is termed a *discoidal* placenta. This exists in Man, Apes, Insectivora, Cheiroptera, and Rodentia. The Carnivora possess a zonular placenta. In the rest it is either diffuse or cotyledonary. (In Hyrax it simulates a zonular form.) In 1839, Professor Owen, in a paper read before the Linnæan Society, and printed in that Society's Proceedings for the year, returning to the cerebral characters, put forth another classification of Mammalia, calling Mr. Waterhouse's smooth-brained mammals Lissencephala, (as shown in the preceding

table;) those with convoluted brains, Gyrencephala, and for Man he formed the sub-class, Archencephala. Now here are three classifications; which of them is the most worthy of adoption? That is to say, which explains in the clearest and most definite way the anatomical characters of the groups which it contains? Professor Huxley began with the last-mentioned. First of all, do the differences said to exist between the brains of Archencephala and Gyrencephala, and of these and Lissencephala really exist? We shall see; and it is better to give Professor Owen's own words to avoid mistakes. These are the characters he gives to his Lissencephala:—"The next well-marked stage in the development of the brain is where the corpus callosum is present, but connects cerebral hemispheres as little advanced in bulk or outward character as in the preceding sub-class, (Lyencephala containing Implacentalia,) the cerebrum leaving both the olfactory lobes and cerebellum exposed, and being commonly smooth, or with few and simple convolutions in a very small proportion composed of the largest members of the group. The mammals so characterized constitute the sub class Lissencephala."

Professor Huxley then exhibited the brains of an anteater and a capybara (both Lissencephala); they were abundantly convoluted. He then showed the brain of a genett, (Viverra,) nearly quite smooth, as is also that of marmoset monkeys, these being placed among Professor Owen's Gyrencephala, which he thus characterizes:—

"The third leading modification of the mammalian cerebrum is such an increase in its relative size that it extends over more or less of the cerebellum, and generally more or less of the olfactory lobes.....The superficies is folded into more or less numerous gyri or convolutions, whence the name Gyrencephala, which I propose for the third sub-class of Mammalia."

It is a puzzling thing to appreciate the value of sub classes placed in such a position. How can a Lissencephala have a convoluted brain and a Gyrencephala a smooth brain? These distinctions may do so far as general characters are concerned, but can never form the definition of a sub-class. And now for Professor Owen's last sub-class, which he defines in the following manner:—

"In Man the brain presents an ascensive step in development higher and more strongly marked than that by which the preceding sub-class was distinguished from the one below it. Not only do the cerebral hemisphores overlap the olfactory lobes and cerebellum, but they extend in advance of the one, and further back than the other. Their posterior development is so marked that anatomists have assigned to that part the character of a third lobe. It is *peculiar to the genus Homo, and equally peculiar is the posterior horn of the lateral ventricle and the 'hippocampus minor'* which characterize the hind lobe of each hemisphere.....I am led to regard the genus Homo as not merely a representative of a distinct order, but of a distinct sub-class of the Mammalia, for which I propose the name Archencephala."

To all who understand plain language, said Prof. Huxley, the meaning of this paragraph is quite clear. When a man gives certain characters as peculiar to one group, he must mean that they are found in that and no other. The lecturer then proceeded to put before his audience facts in opposition to Professor Owen's statements. First, the backward extension of the posterior or third lobe further than the cerebellum is anything but *peculiar* to Man, as Professor Huxley showed by the cast of the interior of the skull of a gorilla (as everybody knows, the cast *of* the interior of the skull in all mammals gives a very good and exact idea of the form of the brain, as in them this organ fills up completely the cavity of the skull); and placing it so that the tentorial plane was horizontal, he showed how the cerebellum was completely covered by the posterior lobes, so that a plane object held perpendicularly to these cannot touch the cerebellum. It is quite as easy to demonstrate this fact with the skull alone. Drawing a line from the lateral sinuses to the margin of the pars petrosa,—attachments of the tentorium,—the overlap is then perfectly clear. And when one comes to the lower apes, baboons, and others, it is obvious on examination that the cerebellum is overlapped to a far greater extent than in Man; and, as T. Geof. St. Hilaire showed long ago, this attains a maximum degree of development in the Chrysothrix—small American monkeys. The same occurs with the posterior cornu, which in Man is sometimes very short, and with the "hippocampus minor"—both being extremely variable. Where the posterior lobe and its posterior cornu exist, the hippocampus minor is always present; it is a prominence on the floor of the posterior cornu, formed by a pushing in, as it were, of a particular sulcus on the inner and under surface of the posterior lobe parallel with the horn. Now, all these structures certainly exist in many apes. Mr. Marshall has shown them in the chimpanzee, Dr. Rolleston in the orang, in which these structures are very largely developed, and, as Prof. Huxley showed with specimens he had, larger comparatively than in some men. The same is the case with the gorilla, and by far the largest number of apes. The lecturer said that he could not understand how, when these characters, said to exist, do not, the two sub-classes, Gyrencephala and Archencephala, can be separated; and surely, even if these did exist, no sound zoologist would make such variable characters the basis of a classification, these being the last structures in the world to base definition on. Thus the sub-classes Gyrencephala and Archencephala fall to the ground. The structures above referred to vary so much, that in two genera of apes,—the South American *Mycetes*, and, as Mr. Flower has recently shown, the Gibbons (*Hylobates*),—the cerebellum projects slightly; and in the last, one of the genera of the man-like apes, the cerebellum is so large that it projects, not only posteriorly, but also laterally.

Let now more positive grounds occupy our time. Milne-Edwards laid great weight on the form of the placenta, but not on its structure—a much more important if not valid character, forming the basis of a classification which is at present the most certain. In all placental mammals examined, the formation of the placenta is preceded by a swelling and increased vascularity of the walls of the uterus, forming the "maternal placenta," into whose depressions and sinuosities the villi of the fœtal placenta dip and interlock; this takes place so firmly in some mammals that at birth the maternal comes away with the fœtal placenta. These may thus be said to have a *coherent placenta;* while all the rest, in which the fœtal placenta alone comes away, have an *incoherent placenta.* As far as our present knowledge goes, this classification holds good for all, and moreover does not break natural affinities. Some say that it is unnatural because it groups together very dissimilar animals, such as men, apes, bats, rodents, hedgehogs, and shrews; but anybody who has studied the so-called Quadrumana is well aware that in them forms exist quite as low as any of these, and differing extremely in many characters one from another—from the gorilla, with a dentition, uterus, and many other organs similar to those of man, tailless and walking nearly erect, to the lemur, possessing a totally different dentition, walking on all fours, and provided with a long tail; and yet nobody has ever doubted that it is one of the Quadrumana, and certainly not the lowest, for in them we have such animals as the tarsius, the rodent-like cheiromys, and the bat-like galeopithecus, feeding on insects, and possessing an intelligence inferior to that of many mammals not belonging to that group. Another question remains. Are we justified in classifying men and monkeys together? The comparison of the human skeleton with that of a gorilla, an orang, a chimpanzee, or any of the higher apes, will answer the question, and show at a glance the great resemblance and similarity there is between them. Now the gorilla, for example, is admittedly placed in the same order as the lemur, the cheiromys, and the galeopithecus, which differ, as we have seen, far more from it than it does from Man. Thus we cannot but place them in the same order, or else all our notions of affinities and resemblances fall to the ground. The following is a table giving the best classification of mammals we possess:—

MAMMALIA.

IMPLACENTALIA.

Ornithodelphia.	*Didelphia.*
Monotremata.	Marsupialia.

PLACENTALIA.

Monodelphia.

Placentæ Incoherent.	*Placentæ Coherent.*		
	Pl. zonary.	*Pl. discoid.*	
Edentata.	Carnivora.	Insectivora.	
Sirenia.		Rodentia.	
Toxodontia. (?)		Cheiroptera.	
Proboscidea.		Primates.	
Peristodactyla.			
Artiodactyla.			
Cetacea.			

THE PRINCE OF WALES'S MARRIAGE.—The Fellows of the Faculty of Physicians and Surgeons, Glasgow, celebrated the marriage of the Prince of Wales, on the 10th instant, by a sumptuous entertainment, to which were invited a large number of the medical gentlemen of the city, and all the registered students attending the medical school.

Correspondence.

"Audi alteram partem."

BETHLEHEM AND ST. THOMAS'S.

To the Editor of THE LANCET.

SIR,—The governors of Bethlehem and St. Thomas's Hospitals being zealously engaged in preliminary arrangements with reference to transferring the first-named charity to the governors of the latter institution, as a site for their new hospital, I shall feel obliged if allowed to occupy a corner of your valuable columns, in order to allude briefly to one or two collateral matters bearing on the questions now under discussion, more especially as in a late number of THE LANCET you have given exceedingly cogent reasons why the subject well deserves attention both by the public and the profession.

Considering the proposal to erect a general hospital on the spot which Bethlehem now occupies as a most judicious suggestion, and seeing that all parties generally coincide in the advantages of having such an establishment in this populous district of London, and further believing it would prove highly beneficial were the insane residents of Bethlehem transferred to some more rural situation not too far from town, I have therefore advocated, and will continue to support, these two propositions, confidently trusting both schemes may be ultimately realized. Should that desirable result follow, I hope the prevalent report is unfounded—viz., an intention to pull down the existing structure, so as to erect an entirely new building nearer the road skirting the north front of the present Bethlehem Hospital. In fact, people say an architectural magnate thinks a "tubular road" must be first made ere commencing operations. If that proceeding be adopted, it will entail an enormous expenditure, besides being wholly unnecessary, seeing the existing walls are of excellent materials, rest on solid foundations, and constitute a superior specimen of brick-work rarely equalled. Were the partitions now separating patients' cells from their adjoining corridor removed, commodious wards, having about twenty-seven feet in width, could easily be made in the central part, east and west of the dome, which would then have rows of windows on both sides, so that proper ventilation could be easily regulated. Further, having a southern aspect, the influence of sunshine—no small consideration in a crowded residence—would not be excluded. In various London hospitals the former feature, or cross lights, is often wanting; besides which, the wards are rarely broader than the width above stated, while two being placed back to back, and with a dead wall of separation between, and windows being only on one side, such receptacles for inmates, even if healthy, and still more when diseased, never can prove salubrious or so admirably ventilated as those of Bethlehem Hospital appropriated for lunatics, but which would be farther improved were the alteration here proposed carried into effect, irrespective of other ameliorations, which, doubtless, sanitary reformers might suggest. Again, in the south wings—only built a few years ago—several small wards, usually containing six beds, with ample space throughout, and having cross windows, whereby pure air can enter freely whenever required, will bear comparison with most apartments for treating patients at various metropolitan hospitals. On other points, equally deserving notice, observations might be added; but, unwilling to extend this letter to too great a length, I refrain. Nevertheless, before those having the power adopt any decision like the rumoured "Delenda est Carthago," it ought to be ascertained by experienced professional authorities, if the measure be really essential? Regarding such an important question, the medical officers of St. Thomas's Hospital ought to be consulted. They are highly competent judges, and I feel assured, were their opinion obtained, it would be adverse either to levelling the main buildings at Bethlehem with the ground, or erecting any new structure farther northward. Having eleven acres and a half,—or rather fourteen acres, if we include the adjacent grounds now appropriated to the house of occupations, but which will soon be transferred to a new building near Guildford, no want of space for constructing additional accommodation can interfere with future improvements or extensions. Indeed, within so extensive an enclosure, besides promenades for convalescents, small pavilions might be also erected, wherein patients having contagious maladies, or requiring quietude and so forth, could be accommodated, especially during hot summer weather. When visiting Russia last autumn, I noticed appendages of that description in the adjacent gardens of several public hospitals, as well at Moscow as St. Petersburg, and their consequent advantages seemed so manifest that analogous structures appear to me well deserving imitation.

Before concluding this communication, I would beg briefly to remark, with reference to an observation made by myself at the recent special court of Bethlehem governors,—namely, that the existing hospital was much behind several lunatic asylums both in Great Britain and on the Continent,—that the remark applied solely to its physical construction, not to its internal management. This opinion cannot, however, create surprise, seeing that various foreign governments, among which Spain and Russia may be specified, have sent medical and architectural commissioners to England, France, and Germany, during recent years, in order to acquire practical information respecting the best mode of constructing hospitals for insane patients; the consequence of this judicious procedure being, that whatever was deemed good in any other country will be taken advantage of and imitated, when completing the new asylums now in course of erection throughout Europe. Thus six public hospitals for lunatics are to be built in Spain, six in Sweden, and five in Denmark, each according to the improved principles recognised elsewhere; and even Russia will not long remain behind other European nations in this respect. Hence none need wonder if several continental asylums lately or now being constructed, should comprise advantages as buildings which much older structures, and even some palatial erections, in different parts of England never can possess. Some of these latter masses of brick, through their exterior ornamentation, no doubt reflect credit on the eminent architects by whom they were designed, and may likewise gratify the eyes of many benevolent spectators when viewed at a distance; but that any adequate benefit to the inmates arises from gorgeous artistic decorations seems exceedingly problematical, while they frequently entail much additional and useless expenditure.

I am, Sir, yours &c.,

Brook-street, March, 1863. JOHN WEBSTER, M.D., F.R.S.

THE ARMY MEDICAL DEPARTMENT.

To the Editor of THE LANCET.

SIR,—I think it quite possible that your remarks in reference to the above Department may be met in this way:—Notwithstanding the great discontent said to exist in the Department, it is not so unpopular as to prevent the appearance of many candidates at each examination, if not in very large, at least in sufficient numbers for the working of the Department.

Putting aside the farce of denominating any examination "competitive" where the number of vacancies exceeds that of the candidates, and overlooking in the meantime that the quantity of the latter is no measure of their quality, I would ask—Is it the fact that men are entering the Service only to get the course at the Army School (which they could nowhere else obtain), on account of its value in these days of sanitary science, &c., and not with the purpose of continuing in the Department?

I have heard that it is so. If this be the case, it is a proof of that want of unanimity of interest and mutual sympathy which is only too characteristic of us as a profession.

The Army medical officer either has or has not substantial grounds for his present discontent; if he has, he is entitled to the support of all members of the same profession, and it is a very short-sighted policy in those who fail to give it.

I am, Sir, your obedient servant,

Feb. 1863. AN ENQUIRER.

DR. FULLER'S LECTURES.

To the Editor of THE LANCET.

SIR,—Having lately seen some articles by Dr. Fuller, on the use of alkalies in rheumatism as preventives of cardiac complications, I was somewhat surprised at finding that no reference was made to some papers on this subject, written by Dr. J. J. Furnivall, in the numbers of THE LANCET of June 1st and 22nd, 1844. Dr. Furnivall there urges strongly on his medical brethren the propriety of treating *all* cases of rheumatism with alkalies, as *essential* to the prevention of cardiac sequelæ. He stated that he believed there was some abnormal alteration of the blood, of acid tendency, only to be counteracted by alkalies. Dr. Wright, of Birmingham, tried the alkaline plan largely in rheumatism, and gave us a very favourable account of the results. Since then, the agency of lactic acid in causing rheumatic cardiac disease and deposits has been proved.

In 1845 Dr. Furnivall published some practical observations,

carrying out his original views. I read that book with attention and benefit; it was clearly and succinctly written, and I would recommend my professional brethren to peruse it. The late *Medical Gazette* at the time spoke highly of it, as a practical work clearly written. Dr. Furnivall also therein recommends the substitution of aconite for the severe prostrating Valsalva system, in cases of aortic aneurism, as being likely to prevent an early bursting of the sac. When he wrote, the Valsalva system of treating such cases, by repeated abstraction of blood and semi-starvation, was alone recommended. In the same book proof is given that valvular disease has occurred in chronic rheumatism without any attack of the acute form. *Honos cui honos.* So whatever credit is to be gained in any case, the first discoverer or promoter should have that credit; and I trust you will find room for these observations from an old correspondent, for the sake of literary and professional justice. Probably Dr. Fuller has not read the essays and book above alluded to, or he would doubtless have mentioned them. On referring to them he will see that I have not misstated the case.

I AM, Sir, your obedient servant,

February, 1863. M. D. (RETROSPICIENS.)

MEDICAL HEALTH ASSURANCE OFFICES.

To the Editor of THE LANCET.

SIR,—Having long felt the desirability of establishing a Medical Health Assurance Society, I shall have much pleasure in giving my humble co operation in the formation and maintenance of such.

The thanks of the profession are due to Dr. Bryan and yourself for drawing attention to this subject, and I have no doubt that, through your further advocacy in THE LANCET, an institution of the kind will ere long be safely and judiciously organized. I am, Sir, your obedient servant,

FREDERICK J. BURGE, M.R.C.S.E.,
Medical Officer of Health, Fulham District.

New-road, Hammersmith, March, 1863.

LICENTIATES IN MIDWIFERY.

To the Editor of THE LANCET.

SIR,—I noticed in THE LANCET a week or two ago a letter respecting the non-registration of the L.M. of the Royal College of Surgeons of Edinburgh and of the Faculty of Physicians and Surgeons of Glasgow.

As a Licentiate of the latter body, and also holding their Midwifery diploma, I really consider that the respected representative of the Glasgow Faculty (Mr. Watt) in the Medical Council, should be appealed to to use his influence in having the L.M. recognised and registered as a legal qualification.

The representative of the Edinburgh College of Surgeons should likewise do the same for the College Licentiates.

There is an amended form of the present Medical Act which I suppose will shortly be brought before Parliament, and I think the L.M.s of the Edinburgh College and Glasgow Faculty should petition each of their representatives to endeavour to introduce into this Amended Act the privilege of registration to their Licentiates in Midwifery. I cannot see why the L.M.s of the College of Surgeons, London, should have the privilege of registering their diplomas, while those of Edinburgh and Glasgow are denied it. Surely these gentlemen will petition in time. I enclose my card.

I am, Sir, your obedient servant,

Feb. 1863. L.F.P.S. and L.M. Glasgow.

ARMY DISPENSERS OF MEDICINES.

To the Editor of THE LANCET.

SIR,—Allow me, through the medium of your widely-circulated journal, to refer to the leading article in the last number of the *Pharmaceutical Journal*, which states it is requisite to hold their certificates of qualification to obtain the honourable position of Army Dispenser of Medicines, and which they appear to hold out as a tempting bait to the aspiring young brethren of their institution!—an appointment to obtain which would justify the outlay of a considerable sum of money in order to possess these certificates, the position of army dispenser being really unworthy the acceptance of a pharmaceutical chemist. If medical officers of the army are aggrieved, or their positions affected in any way, the medical journals and schools induce the young members of the profession to refrain from entering the service until they obtain those rights to which their professional attainments entitle them. In like manner, ought not the Pharmaceutical Society to act, and advise their members to refuse appointments which only lead to vexation, discomfort, and disappointment? Let me bring under their notice the treatment these gentlemen receive from the commissioned army medical officers, and the especial injustice to three dispensers, lately reduced, after nearly six years' service in every quarter of the globe, and who have proofs of having conducted themselves in a highly efficient and creditable manner. These gentlemen have been suddenly informed (laconic enough) that they are now no longer required, which treatment can only be compared with that of a dockyard labourer!—this not being the first occasion of gentlemen being so treated when under the impression of the appointments being permanent.

The Pharmaceutical Society does not appear to be aware that this new field of ambition consists of nineteen appointments only, and the prospect of vacancies remote indeed.

Let me suggest that the Society demand from the Army Medical Department that position for its members when entering the army service which they state their qualification of pharmaceutical chemist entitles them to—namely, that of professional men.

In again referring to the treatment of dispensers by army medical officers, let me remind the members of that Department of how many surgeons and gentlemen of their own profession keep shops and vend articles with which a pharmaceutical chemist would not disgrace his establishment. I should not allude to this did it not appear that army medical officers have some ridiculous prejudice against dispensers, and do all in their power to make their duty irksome and their position uncomfortable.

I enclose my card, and remain, Sir, yours respectfully.

Feb. 1863. PHARMACEUTIST.

RUSSELL *VERSUS* ADAMS.

WE have received a letter from Mrs. Russell, the plaintiff or principal witness in the late action, Russell *versus* Adams. It gives no fresh evidence in support of the charge adduced on the trial. It contains, however, a highly libellous charge against Mr. Adams, which we cannot consent to be the means of promulgating. The only point we think it necessary to cite is Mrs. Russell's assurance, that "Mr. Propert never did give one pound to conduct this cause." Notwithstandin this assurance, it must still be painfully obvious that a further explanation from Mr. Propert of his connexion with this case is imperatively required.

THE ROYAL COLLEGE OF SURGEONS AND THE GEORGE-STREET ANATOMICAL MUSEUM.

THE exposure of the obscene manner of conducting the Anatomical Museum of Mr. Jordan, of George-street, which it was our duty to make lately, has borne good fruit to the profession and public. The handbills setting forth the contents of the Museum, illustrative of the "diseases resulting from chastity and obstacles to marriage," inviting passers by "to inspect the figure of the young mother, showing the actual position of twins; the figure of a lady who, under the influence of chloroform, is undergoing the Cæsarean operation," and which outraged the feelings of decent men and women to whom they were distributed, have been under the consideration of the College of Surgeons of England, of which Mr. Jordan is a member. It is always with some reluctance that we touch upon these unpleasant incidents in professional life; but, in this case, the Museum was of a character so thoroughly unprofessional, and the outrage on public propriety so glaring, that we could not reconcile silence with our sense of duty. The profession will learn with general satisfaction, that the Council of the College of Surgeons, in the exercise of the enlarged privileges which the Medical Act confers upon them, and on the importance of which we so recently insisted, have called upon Mr. Jordan to show cause why they should not expunge his name from the College list; and the matter is under consideration, whether this erasure shall be carried into effect. Whatever may be the

decision in this respect, whether or not the apology and promises of amendment which Mr. Jordan is understood to have made, avail to save him from being thus expelled from the body of Surgeons, the Council have deserved well of the profession, by thus acting up to their duty of preserving the honour of their body, and preparing to purge their list of names unfit to be associated with those of the honourable members of a most noble profession. They have already exercised this right in respect to Sir Charles Aldis and Dr. Batchelor. We shall probably be able next week to announce their decision in respect to Mr. Jordan, the proprietor of the George-street Museum.

PARISIAN MEDICAL INTELLIGENCE.

(FROM OUR SPECIAL CORRESPONDENT.)

M. VELPEAU, a few days ago, delivered a clinical lecture at the Charité, having for subject the ultimate effects produced on the movements of a limb by a permanent luxation of one of its joints. The locomotive power this surgeon maintains is very much recovered by the injured limb at the expiration of a longer or shorter period. The particular case which served as text for his observations, was that of a young man admitted for a contusion of the side, in whom there existed an old unreduced luxation of the left shoulder. All the characteristic signs of this lesion were present: the sub-acromial depression, the shortening of the arm, the tension of the deltoid muscle, and the presence, beneath the collar-bone, of a hard, round substance, the head of the humerus. The patient stated that this condition had existed for ten years, and was caused by direct violence—viz., a fall from the top of a cart. When transported after the accident to Beaujon, four successive attempts at reduction were made by the late M. Robert, without success; and similar endeavours were repeated, on two occasions, by M. Malgaigne, with a like result. These failures M. Velpeau attributes either to the entanglement of the luxated head of the bone in the fibres of the subscapularis, or to a fracture or displacement of the glenoid cavity itself. As M. Velpeau further remarks, the danger attending the employment of very forcible measures for reduction is considerable. The rupture of the axillary artery, paralysis, emphysema, &c., may, and do, follow the use of great extensive efforts, and should be carefully weighed by the surgeon as possible contingencies. On the other hand, if the luxation be left to itself what happens? M. Velpeau's attention was drawn to the subject for the first time in 1831. During that year he amputated the leg of a patient at the Pitié. This man died, and, as he presented an old unreduced luxation of the shoulder-joint, M. Velpeau carefully examined the articulation. This patient had entirely or nearly so, recovered the movements of the injured limb. On dissection, the concave surface of the glenoid cavity was found flattened, shelving inwards, and altogether transformed, so as to be unfit for the reception of the head of the bone—which last had adapted itself to its new position, in which it functioned as in a hinge-joint. Consequently, M. Velpeau having, since the above-mentioned period, witnessed many instances of old luxation in which a useful amount of movement has been regained, is averse to the plan of attempting reduction in cases of long-standing dislocation.

An interesting trial regarding a supposed case of child-murder which occurred some weeks ago at Chartres, has given rise to an animated correspondence between a M. Devaureix, counsel for the defendant, and M. Pajot, the celebrated accoucheur. The case was briefly this:—The dead body of a female child was found in a cellar, and two experts, Drs. Barbon and Anthoine, were named to examine into the causes of death. The results of their investigation were that the child had been born alive, and had breathed, and that death had been caused by asphyxia, occasioned by violence exerted on the head. In the subsequent interrogation, M. Barbon declared that, in his opinion, the child had been seized by the legs or body, and had been repeatedly dashed on the floor. M. Anthoine, on the other hand, maintained that the injuries to the head had been caused by violent compression by the hands of the murderer. The accused, the mother of the child, denied all knowledge of the crime attributed to her, and accounted for the death of the infant by saying that the labour had been so sudden as to occasion the fall of the child on the ground. M. Devaureix, the advocate, in pleading his client's cause, dwelt forcibly and at length upon the discrepancy of the expert testimony, quoted largely from Baudelocque, Dubois, Mauriceau, Charries, La Chapelle, &c., and so bespattered and bewildered the court with his mock medicine, that he gained his suit. Not content with one success, he must needs risk another, and a second time enter the medical lists, challenging M. Pajot to break a lance upon the new ground he had so boldly entered. (M. Pajot had in the interim expressed his opinion as to the probabilities of the cause of death). M. Devaureix' letter to the celebrated obstetrician is given at length in the *Gazette des Hôpitaux*, and contains a hodge-podge of medicine, law, and sentiment—the latter in nauseating doses.

The reply of M. Pajot has, luckily for the client of the Chartres Demosthenes, appeared a "day after the fair" one's acquittal, else the enlightened jury might possibly have seen the matter in another point of view. After setting right some dozen or so of the lawyer's blunders, he adds, "If I, sir, a professor of obstetrics, had to plead on a point of law, I should not fail to consult all the authors who had written on the subject, and if I had the happiness to be gifted with powers of oratory equal to yours, I might, before an incompetent jury, also gain my cause. But you and your brethren who heard me would not fail to smile at the few good solid heresies which might from time to time escape me—perchance you might even now and then nudge your neighbour whenever it occurred to me to mistake the Piræus for a man. Well, sir, it is the common law of all; and surely, with your talent, you can brave anything. Let me join my congratulations to those you have already received on the manner in which you have pleaded this cause. But I cannot congratulate you upon your obstetric knowledge; it is, at the very best, as deficient as is mine in jurisprudence. I hope that you will be as easily consoled in the matter as I shall.—Yours, PAJOT."

Paris, March 10th.

Parliamentary Intelligence.

HOUSE OF COMMONS.

MARCH 11, 1863.

EMBANKMENT OF THE THAMES.

MR. COWPER moved the second reading of the London Coal and Wine Duties Continuance Bill.

Mr. WILLIAMS intimated that he should oppose it in a subsequent stage, if a Bill were not introduced to embank the south side of the Thames.

Mr. AYRTON hoped that the present opportunity would not be lost of placing the finances of the metropolis on a more satisfactory basis. If the accounts were brought into a consolidated shape, he believed loans might be effected on the credit of the metropolis on much more economical terms.

Mr. DOULTON gave notice that he should oppose that part of the Bill which proposed to hand over to the City of London the 4*d.* coal duties.

The Bill was then read a second time.

On the motion for the second reading of the Thames Embankment (North Side) Bill,

Mr. DOULTON observed that he had formerly stated that there was a great discrepancy between the estimates of the engineers and the right hon. gentleman the First Commissioner of Works. The estimate of the right hon. gentleman's engineer was £460,000; that of the engineer to the Metropolitan Board £690,000, showing a difference of £230,000. Since he made that statement the former estimate had been advanced to £500,000, and the latter reduced to £620,000.

Sir J. SHELLEY asked when the evidence which was taken before the Royal Commission on this street would be in the hands of members.

Mr. AYRTON asked whether the Bill was to be referred to a committee of five or of fifteen members.

Mr. COWPER said that he proposed to refer the Bill to a committee of fifteen members, one-half of whom should be appointed by the Committee of Selection. The report of the evidence, if not already in the hands of members, would be delivered immediately. The difference of estimates to which the hon. member for Lambeth had referred arose from a difference of opinion, not as to the value of property to be taken, or to the cost of works, but as to the line of the street itself.

After a few words from Mr. LOCKE and Mr. TITE,

The Bill was read a second time, and ordered to be referred to a select committee.

CHOLERA IN THE PUNJAB.

Sir W. MILES asked the Secretary of State for India whether he had any objection to lay before the House the report of a Scientific Commission, appointed in the autumn of 1861, to inquire into and report upon the epidemic of cholera, which had just caused great mortality in the Punjab and in the Valley of the Ganges; together with any correspondence that might have taken place upon the subject between the Home authorities and the Cholera Commission.

Sir C. WOOD said that no such report or correspondence had been received.

MEDICAL TRIALS.

CROWN COURT, NORFOLK.

(*Before the* LORD CHIEF JUSTICE.)

THE case of Martin Miles, charged with the manslaughter of Mary Markham, commenced on the 10th, and was not concluded until the following evening.

Mr. Stephenson appeared for the prosecution; the prisoner was defended by Mr. Metcalfe.

The prisoner was charged with having caused the death of Mary Markham, through his negligence and want of skill when attending her in her confinement. The case excited considerable interest, not a little increased by the medical evidence that was produced both for the prosecution and for the defence, and by the fact that in consequence of suspicion of mistreatment there had been an examination of the body of the deceased woman, some little time after her death, instituted by order of the Government.

The evidence of the medical men, one of whom was called in to attend the poor woman before her death, and all of whom were present at the post-mortem examination, is too lengthy for publication, but during the cross examination of the first of these witnesses an attempt was made to show that his evidence was biassed by the professional jealousy of a regular practitioner at a chemist being called in to attend a case of this kind.

After a speech from Mr. Metcalfe, and a careful summing-up by his Lordship, the prisoner was Acquitted.

Medical News.

ROYAL COLLEGE OF SURGEONS.—The following Members of the College, having been elected Fellows at previous meetings of the Council, were admitted as such on the 11th inst.:—

Barrow, Benjamin, Ryde, Isle of Wight; diploma of membership dated June 27, 1836.
Cathrow, William, Weymouth-street, Portland-place; Nov. 5, 1830.
Gelson, John Thomas, Chelmsford; Sept. 2, 1835.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 5th inst.:—

Boustead, Robinson, Buckingham-street, London.
Lacey, John, Wyle Cop, Shrewsbury.
Page, William Irving, Ulster-place, Regent's-park.

OLDHAM MEDICAL SOCIETY.—Mr. Abraham Leach has been elected President; Mr. Alex. T. Thomson, Treasurer; and Dr. Samuel Harris, Secretary of the above Society.

THE JEWS' HOSPITAL, at Lower Norwood, has been opened in the presence of a large number of the friends of the institution.

COMPARATIVE PROFESSIONAL MORTALITY.—Of 1000 persons, the average number who reach the age of 70 are—clergymen, 42; agriculturists, 40; artists, 28; professors, 27; and physicians, 24.

TESTIMONIAL TO DR. FENWICK.—The friends of Dr. Fenwick, of North Shields, presented him with a handsome and substantial testimonial, consisting of a tea and coffee service, on Tuesday, the 3rd instant.

LOUGHBOROUGH INFIRMARY.—This new and handsome building, the gift of Mr. W. Perry Herrick and his sister, was formally presented by the munificent donors to the trustees, governors, committee, and subscribers, at a meeting (at which a great number of the nobility and gentry of the neighbourhood were present) held on Wednesday, the 4th instant. The ceremony was one of great rejoicing, to which was added the solemnities of anthems and special prayer.

LAMB DISEASE.—Dr. Edwards Crisp, of Parliament-street, who has already carried off so many professional prizes, has just received from the Bath and West of England Society for the Encouragement of Agriculture, Arts, Manufactures and Commerce, their prize of £30 for his Essay on the Lamb Disease, of which parasites in the lungs are generally the cause or consequence.

PROFESSOR ESCHRICHT.—Science, says the "Danmarck," has lately had a great loss. Professor D. F. Eschricht, the physiologist and anatomist, died suddenly on Sunday, the 22nd ult., about the age of 65. He is best known in England by his learned labour on the subject of the whale.

SMALL-POX AT THE CAPE OF GOOD HOPE.—Small-pox has been virulent and very fatal about Moselikatse's country; it has nearly destroyed the tribe of the Bangamwatos, amongst whom the dead were so numerous that they were abandoned to the hyenas.

UNHEALTHINESS OF EDINBURGH CASTLE.—The Report of the Commission on Barracks and Hospitals gives the mortality at 14 per 1000 strength, a death-rate considerably above the average army rate in Scotland, which is 9·3. At Piershill Barracks, about two miles distant, it is under 3 per 1000, and at Leith Fort about 2½ per 1000 strength. The Commissioners have recommended various improvements in the hospital.

THE LONDON FEVER HOSPITAL, in 1862, received 2699 patients, being 938 in excess of the largest number of patients received in any previous year. This great increase was chiefly due to the prevalence of typhus fever. Since the foundation of the hospital, in 1802, 34,949 patients have been admitted.

AWKWARD MISTAKE.—During last week several persons who had gone to the shop of Mr. Fisher, druggist, of Goodramgate, York, to purchase cream of tartar, were taken seriously ill, when it was discovered that tartar emetic had been supplied to them by mistake. It is due to Mr. Fisher to say, that the error arose not with himself, but with a wholesale house from which he received his drugs.

CORK HOSPITAL.—The new General Hospital for the County and City of Cork was formally opened on the 19th instant, by the Mayor of Cork, in the presence of a large party of ladies and gentlemen, including several eminent members of the medical profession.

BIRTHS AND DEATHS IN SCOTLAND.—During the month of February there were registered, in the eight principal towns of Scotland, the births of 2744 children, of which 1396 were males, and 1348 females. There were 2186 deaths, of which 1072 were of males, and 1114 females. Of the deaths, 1018, or 46 per cent. were of children under five years of age.

ABERDEEN ROYAL INFIRMARY.—At a meeting of the Managers, held on the 9th inst., the following elections were made:—Pathologist and Curator of the Hospital Museum, Dr. Robert Beveridge, Aberdeen; Physician (in the room of Dr. Dyce, resigned), Dr. George Carr, Aberdeen; Ophthalmic Surgeon, Dr. J. R. Wolfe, Montrose.

GIBRALTAR.—The sanitary condition of Gibraltar is now a subject of great interest to the local authorities. With a death-rate of 31 per 1000, and among a population who are not engaged in any occupation calculated to shorten life, there must be, doubtless, great necessity for improvement.

THE RATE OF MORTALITY, as given by Dr. Macpherson, of Calcutta, for the following places, is estimated for every 1000 of population:—Tasmania, 13¼; Great Britain, 22; London, 25; France, 28; Prussia, 29; Madras, 30; Austria, 32; Liverpool, highest in England, 33½; London, in cholera year, 1839, 33½; Bombay, 37½; Calcutta, 40½; London, in the sixteenth century, 50; London, during the great plague, 80.

THE COUNTY AND CITY OF WORCESTER LUNATIC ASYLUM.—A new "recreation-room" has been built at the above Asylum. It is about seventy feet long and forty-three wide, with a semicircular ribbed roof, the springings of which are supported by pilasters. At one end is a recess fitted up as a stage for dramatic and other entertainments; opposite to it is a gallery, the whole affording accommodation for 500 seated. The room was opened a few days since with a series of performances, chiefly supported by the staff of the establishment, and consisting of two farces, singing, and country dances and quadrilles. The patients were supplied with refreshments, and were delighted with the evening's amusement. Dr. Sherlock, the Superintendent, entertained a large party of the neighbouring nobility and gentry.

TESTIMONIAL TO A SURGEON.—The labouring poor of the parishes of Histon and Impington, Cambridgeshire, have presented Mr. Bridger, Surgeon, with a handsome chased silver tray, mounted with two inkstands and a candle-holder, engraved with the following inscription:—"Presented to John Bridger, Esq., Surgeon, as a grateful tribute from the poor of Histon and Impington, for his kindness, skill, and attention throughout a prolonged epidemic of diphtheria, collected from about 200 subscribers, by Samuel Butler, William Gawthroup, and William Cornwell, after their daily work."

SCOTTISH MEDICAL PROTECTION ASSOCIATION.—A meeting of the medical profession was recently held at Glasgow, "to consider what should be done in reference to procuring a repeal of the law under which the profession in Scotland are compelled to grant certificates of the cause of death of their patients," which resulted in the formation of the above Association. Dr. Thompson was appointed President, Dr. Walker Secretary, and Dr. M'Carron Treasurer.

DEATH FROM THE FUMES OF NITRIC ACID.—A very painful sensation has been caused in Edinburgh by the death of Mr. Stewart, one of the masters, and also of the janitor of the Edinburgh Institution. Mr. Stewart was, on Wednesday last, carrying a jar of nitric acid across the laboratory, when it fell on the floor and was broken. He was assisted by the janitor in wiping the floor and in endeavouring to save a portion of the fluid, and they both inhaled the deadly fumes. Mr. Stewart went home unconscious of the injury he had sustained. In an hour or two he began to experience difficulty of breathing, and, notwithstanding the exertions of the most eminent medical men of the city, he died about ten hours after the accident. The janitor was taken ill, and, although he rallied for a short time, died on the following day.

SURGEON-MAJOR D. COSTELLOE, M.D., in medical charge of the 103rd Royal Bombay Fusiliers, having been promoted to Deputy Inspector-General of Hospitals, consequent upon the death of the late Dr. Grierson, the officer commanding the regiment publishes the following in the regimental orders:—"By the officer commanding H.M.'s Royal Bombay Fusiliers: In taking leave of Surgeon-Major Costelloe, after an uninterrupted service of upwards of eight years, during which period he has been in medical charge of the regiment, the commanding officer feels it a pleasing duty to record the high sense he entertains of that officer's professional qualifications. The zealous manner in which he has at all times (both in quarters and on field service) performed his duties, and his attention and kindness during sickness, have won for him the esteem and respect of all ranks; the commanding officer, in bidding Dr. Costelloe farewell, begs to assure him that he will ever take a lively interest in his welfare, and hopes that ere long he will see him at the head of the Bombay medical service, an ornament to his noble profession, and esteemed and respected by all."

INCREASED VALUE OF OPIUM.—The last sale of opium in Calcutta during the month of January realised £450,000 against £350,000 in December. It is a remarkable fact that an increase of 1000 chests a month has not lowered the price, though the December rate was £30 a chest above the price estimated by Mr. Laing.

NEW MOTOR SYSTEM OF THE HEART.—Professor Von Bezold, of Jena, states that he has, in the course of some researches on the motions of the heart, discovered a new source of motor nerves of this organ, which connect it much more intimately and importantly than the cervical sympathetic, or even the par vagum, with the cerebro-spinal system. The experiment of poisoning various animals with woorara led him to the belief that the new central organ has its seat neither in the medulla oblongata nor in the brain. Further experiments, however, are necessary to develop the discovery.

OXYGEN GAS.—At the last sitting of the Academy of Sciences of Munich, Baron Liebig made a very interesting communication relative to some experiments made with a new apparatus—manufactured chiefly at the expense of the King of Bavaria—for detecting the existence and measuring the quantity of oxygen in various bodies. The experiments, Baron Liebig stated, had proved clearly that oxygen is not only evolved from the atmosphere by plants, but also in tolerably large quantities by decomposition of water in the body of flesh-eating animals. Baron Liebig thinks that the knowledge of this fact will throw quite a new light on the hitherto but imperfectly understood processes of nutrition and digestion.

RECREATIONS FOR THE INSANE.—Mrs. Macready delivered recitals (which occupied about two hours) at the Hospital for the Insane, Belfast, on Wednesday, the 4th inst. The patients testified their gratification in most unmeasured terms; and Dr. Stewart, the Resident Physician, proposed a vote of thanks, which was heartily responded to. The evening's entertainment was concluded with dancing to the music of the Hospital Band, which is composed entirely of patients.

COD-LIVER OIL IS MEDICINE, for it has been so decided by the Poor-law Board, on a reference to them by the Bridgwater Board of Guardians, the question having been raised by one of the medical officers of the Bridgwater Union, who contended that, under his contract to attend the paupers and supply all medicines, he was not bound to supply cod-liver oil.

COURT OF QUEEN'S BENCH, DUBLIN, FEB. 11TH.—JOHN MCDONALD *v.* WILLIAM R. MARTIN.—The plaintiff brought this action to recover damages for the alleged neglect and want of skill of the defendant, and the defendant pleaded a denial of any retainer, and of there being any negligence on his part.

In September, 1861, Dr. Woods, of Newtownards, County Down, Ireland, was in attendance on the wife of the plaintiff, John McDonald, a small farmer at Ballymoney, during her confinement. Anticipating some difficulty in the case, he called in the assistance of Dr. Martin. At the birth the use of instruments was found to be necessary, but, owing to the weakness of the patient, the delivery was not completed on their first joint visit, and both gentlemen left the patient at eight o'clock in the morning, promising to return at two o'clock. Dr. Woods was again in attendance at that time, and completed the delivery, shortly after which the patient died. Dr. Martin did not attend for some time afterwards. The question mooted was as to his responsibility as consultant surgeon.

Dr. C. Pardon, of Belfast, gave it as his opinion that the regular medical attendant ought to remain in a dangerous case, unless, being exhausted, he arranged with the consultant surgeon for the latter to remain.

Dr. Denham, of the Lying-in Hospital, Belfast, did not think it was the duty of the consultant to remain. Dr. Pirrie, of Belfast, gave a similar opinion.

The jury ultimately found for the defendant, with sixpence costs.

We think the jury arrived at a just verdict. It is admitted—at all events on this side of the Channel—that under ordinary circumstances the consultant is not expected to remain in attendance upon the patient. It is obvious that, unless the duties of the ordinary medical attendant and the consultant practitioner are clearly defined, a prolific source of dispute will be engendered. The Dublin jury appear to have appreciated the importance of this question. It is to be fervently hoped that English juries in cases that will shortly be brought before them will exercise the same wise discretion. Actions with respect to the responsibility of medical practitioners have assumed a serious and disastrous aspect. It is high time that their real responsibilities should be accurately defined. In the present state of the law no man is safe. It is equally to the interest of the public and of the profession that this most important question should be settled.

MUNIFICENCE.—By the will of Miss Rosa Frances Lewis, of Cadogan-place, which has just been proved in London, the following medical charities, among several other institutions, benefit by this lady's liberality:—St. George's Hospital, £200; the Brompton Consumption Hospital, £200; the Asylum for Idiots, £100; the Lying-in Charity, Liverpool; £200; the Infirmary, Brownlow-hill, £200; and the Dispensary, Vauxhall-road, Liverpool, £200.

CONFLICTING DECISION AS TO THE RIGHTS OF MEDICAL MEN.—We extract the following from the Barrie *Northern Advance*. It will be remembered that in the case of Shaver against Linton, the judge held that a M'Gill College diploma entitled the holder to practise in Upper Canada without the necessity of obtaining a provincial licence:—

Reg. *v.* Townley.—The defendant, a medical man, holding a diploma from the Royal College of Surgeons, was charged with practising without licence. The offence was proved, and the defendant found guilty; but, on motion in arrest of judgment, the indictment was held to be defective on the ground of uncertainty. Judgment was, however, reserved, and the defendant discharged on his own recognizance. Upon the question, which was also raised, whether a man licensed to practise in Lower Canada was also entitled to practise in Upper Canada, his Honour decided in the negative.

HEALTH OF LONDON DURING THE WEEK ENDING SATURDAY, MARCH 7.—In the week that ended last Saturday the total number of deaths was 1370. It was stated in last return that small pox showed a decided increase. The deaths from it then recorded were 42, and the same number appears in the present return. Measles was fatal in 38 cases. There were 67 deaths from scarlatina. Those from phthisis were 149; those from bronchitis 144; those from pneumonia 88.

The births were—boys, 957; girls, 875.

MEDICAL VACANCIES.

Clayton Hospital and Wakefield General Dispensary—House-Surgeon.
Leominster Union (Borough District)—Medical Officer.

MEDICAL APPOINTMENTS.

G. H. ATWELL, L.R.C.P., has been appointed Senior House-Surgeon and Secretary to the York Dispensary, vice F. Norton Manning, M.D., resigned.

R. BEVERIDGE, M.B., has been appointed Lecturer on Pathology and Morbid Anatomy at the Royal Infirmary, Aberdeen, and Curator of the Museum (a newly created appointment).

A. BONTHRON, M.D., has been appointed Surgeon-Superintendent of the Queensland Government Emigrant Ships.

G. CARE, M.D., has been appointed Physician to the Royal Infirmary, Aberdeen, vice R. Dyce, M.D., resigned.

J. WRIGHT CRAIG, M.D., has been elected Assistant Medical Officer of St. Giles and St. George Infirmary, Bloomsbury, vice N. Englehart Cresswell, M.R.C.S.E., resigned.

W. F. DIXIE, M.D., has been appointed Medical Officer of the first District and the Workhouse of the Lutterworth Union, Leicestershire, vice C. Bond, M.D., resigned.

C. L. EDWARDES, M.R.C.S.E., has been elected Medical Officer and Public Vaccinator for the Rugeley District of the Lichfield Union, Staffordshire, vice T. Salt, M.R.C.S.E., resigned.

W. EVANS, M.D., has been appointed Medical Officer and Public Vaccinator for the fourth and fifth Districts of the Devizes Union, Wilts, vice F. G. White, L.R.C.P.Ed., resigned.

L. FISHER, M.D., has been promoted to be Senior House-Surgeon of the Dispensary, Preston, Lancashire, vice R. C. Brown, M.B., resigned.

J. J. FOXWELL, L.R.C.P.Ed., has been appointed Medical Officer and Public Vaccinator for District No. 1 of the Bristol Corporation of the Poor, vice J. Knill, L.R.C.P.Ed., appointed to the Nettlebed District of the Henley Union, Oxfordshire.

J. GODWIN, M.R.C.S.E., has been elected Medical Officer to District No. 4 of the Winchester Union, vice J. Wilde, L.R.C.P.Ed., appointed to District No. 1.

J. LLOYD JONES, M.R.C.S.E., has been appointed Junior House-Surgeon of the Dispensary, Preston, Lancashire, vice Luke Fisher, M.D., promoted.

T. KNIGHT, M.R.C.S.E., has been elected Medical Officer and Public Vaccinator for the Waterperry District of the Thame Union, Oxfordshire, vice J. W. Kimpton, M.R.C.S.E., resigned.

T. LUCKIE, M.D., has been elected a Member of the Royal Institution of Great Britain.

P. J. M'EVOY, L.K.Q.C.P.I., has been elected Medical Officer to the Rathcoole Dispensary District of the Celbridge Union, Co. Kildare, vice M. Talbot O'Kelly, L.R.C.S.I., appointed Medical Officer to the Celbridge Union Workhouse.

J. W. HARRIS M'KENZIE, M.R.C.S.E., has been appointed Medical Officer for the Checkley District of the Cheadle Union, Staffordshire, vice J. Ritchie, L.R.C.S.Ed., deceased.

T. O. MAYOR, M.R.C.S.E., has been elected Medical Officer for the Clifton Union Workhouse, vice J. M. Granville, L.R.C.P., resigned.

A. L. PEACOCK, L.S.A., late Acting Resident Medical Officer to the St. Marylebone General Dispensary, has been elected to the office of Assistant House-Surgeon to the Sheffield Public Hospital and Dispensary.

J. T. PENHALL, M.R.C.S.E., has been appointed one of the Assistant-Surgeons to the East Sussex, Hastings, and St. Leonard's Infirmary, consequent upon the death of R. Cooper Gardiner, M.R.C.S.E., and the promotion of G. B. Turner, M.D.

J. RUTHERFORD RUSSELL, M.D., has been elected a Member of the Royal Institution of Great Britain.

J. C. SAVERY, M.R.C.S.E., has been appointed one of the Assistant-Surgeons to the East Sussex, Hastings, and St. Leonard's Dispensary, consequent upon the death of R. Cooper Gardiner, M.R.C.S.E., and the promotion of Dr. Turner.

J. SYMES, L.K.Q.C.P.I., has been elected Medical Officer to the Gorey Union Workhouse and Fever Hospital, vice J. Isdall, M.D., resigned.

G. BROWN TURNER, M.D., Assistant-Surgeon to the East Sussex, Hastings, and St. Leonard's Infirmary, has been elected to Surgeon, vice John Savery, M.D., promoted to the office of Surgeon Extraordinary.

J. T. VALLANCE, M.D., has been appointed Medical Officer to the Industrial School, Whitechapel Union, vice A. J. Humbley Banks, M.D., resigned.

J. REISSENBG WOLFE, M.D., has been appointed Ophthalmic Surgeon to the Royal Infirmary, Aberdeen, vice J. Cadenhead, M.D., deceased.

J. WITHAM, of St. George's Hospital, has been appointed House-Surgeon to the Male Lock Hospital, Dean-street, Soho, vice J. Wilkins Williams, M.R.C.S.E., whose term of appointment has expired.

[J. Robinson Pope, M.R.C.S.E., has been elected Surgeon to the Hastings Dispensary, and not to the East Sussex, Hastings, and St. Leonard's Infirmary, as stated in our last.]

MILITARY AND NAVAL MEDICAL APPOINTMENTS.

H. ATKINS, Assist.-Surg. Bombay Service, has been transferred from general duty, Northern Division, to the medical charge of the 4th Native Infantry (Rifles).

Assist.-Surg. BLOOMFIELD, Bombay Service, from general duty, Sindh, has been attached to the 8th Native Infantry, vice Pinkerton.

H. COOK, M.D., Assist.-Surg. Indian Service, has been confirmed as Civil Surgeon at Sattara.

A. FORBATH, M.D., Surgeon 1st Dragoon Guards, having completed twenty years' full-pay service, has been promoted to Surgeon-Major under the provision of the Royal Warrant of Oct. 1st, 1858.

H. GOODALL, Surg.-Major Indian Service, has been placed on the Retired List on a pension of £700 per annum under the provision of the Royal Warrant for the Indian Medical Service of Jan. 13th, 1860, and G.O.G. No. 206 of June 18th, 1861.

H. KING, M.B., Assist.-Surg. Indian Service, has been appointed Civil Assist.-Surgeon of Baitool, Central Provinces.

R. G. LORD, M.D., Senior Assist.-Surg. Indian Service, has been promoted to Surgeon, vice Deputy Inspector-General of Hospitals D. Grierson.

J. LUMSDAIN, Assist.-Surg. Indian Service, has been confirmed as Civil Surgeon at Khelat.

P. HUME MACLAREN, M.D., has been appointed Assistant-Surgeon to the Edinburgh County Militia, vice Dyce, resigned.

A. MURRAY, Staff Surgeon R.N. Aug. 15th, 1848, has been appointed to the "Impregnable."

C. G. H. ROSS, Assist.-Surgeon Bombay Service, has been transferred from general duty, Poona, to the medical charge of the 2nd Grenadiers, vice Nicholson.

G. E. SEWARD, Assist.-Surg. Indian Service, has been appointed Surgeon to the Political Agency at Zanzibar.

Births, Marriages, and Deaths.

BIRTHS.

On the 18th ult., at Workington, Cumberland, the wife of T. S. Dougias, M.R.C.S.E., of a son.

On the 1st inst., at Park House, Clifton, Bristol, the wife of S. Maryiyn, M.D., of twin daughters.

On the 3rd inst., at the Manor House, Chiswick, the wife of Harrington Tuke, M.D., of a son.

On the 3rd inst., at Westbourne-grove-terrace, Bayswater, the wife of R. Stark Tate, M.R.C.S.E., of a son.

On the 3rd inst., at Newmarket, the wife of W. H. Day, M.D., of a daughter.

On the 3rd inst., at Elms, Finglas, Co. Dublin, the wife of L. A. Renehan, L.R.C.S.I., of a son.

On the 6th inst., at Monkgate, York, the wife of W. H. Arthur, M.D., of a son.

On the 6th inst., at the Royal Naval Hospital, Haslar, the wife of J. Whicher, M.D., Surgeon R.N., of a daughter.

On the 6th inst., at Sussex-gardens, Hyde-park, the wife of J. Scott, Inspector-General of Hospitals H.M.'s Indian Service, of a daughter.

On the 7th inst., at Dundalk, Co. Louth, the wife of J. M. Callan, M.D., of a daughter.

On the 7th inst., at Boulogne-sur-Mer, the wife of Geo. C. Hope, M.D., of a daughter.

On the 7th inst., at Vyvyan-terrace, Clifton-park, Bristol, the wife of J. W. Mostyn, M.D., Staff Surgeon Army, of a daughter.

MARRIAGES.

On the 14th ult., at St. George's, Hanover-square, E. Hare, Surgeon-Major Indian Army, to Mary Anne, only child of R. Wood, Esq.

On the 24th ult., at Alvaston, Derbyshire, H. Topham, M.R.C.S.E., of Derby, to Sarah Jane, youngest daughter of the late H. F. Smith, Esq., of Alvaston Hall.

On the 3rd inst., at St. George's, Hanover-square, C. J. Hare, M.D., of Brook-street, Grosvenor-square, to Catherine, youngest daughter of T. Westhead, Esq., of Orington-square.

On the 4th inst., at the Cathedral, Manchester, John Murray, M.D., Indian Army, eldest son of John Murray, M.D., of Kershowe, Roxburgshire, to Lucy Henderson, only child of the late R. Smith, Esq., of Trafford Old Hall, Manchester.

On the 5th inst., at Rotherham, Yorkshire, F. Gervis Jackson, M.D., to Elizabeth Downs, only daughter of the late Thos. Badger, Esq., Coroner, of Rotherham.

On the 5th inst., at Christ Church, Forest-hill, Geo. Lawson, F.R.C.S.E., of Park-street, Grosvenor-square, to Mary Louisa, widow of the late Chas. Jenkins, Esq., of the Bengal Civil Service, and second daughter of W. Thomson, Esq., Deputy Inspector-General of Hospitals, Dacca, Bengal.

On the 6th inst., at Killin, Dr. J. M'Laren, to Catherine, youngest daughter of the late A. M'Tavish, Esq., of Killin.

On the 9th inst., at Fisherton, G. Pearce, M.D., of Market-Harborough, to Sophie, second daughter of W. C. Finch, M.D., of The Hall, Fisherton, near Salisbury.

DEATHS.

At Gnosall, Staffordshire, John Jones, Surgeon, aged 84.

On the 23rd of Nov., at Clarence River, New South Wales, D. Little, M.D.

On the 17th of Dec., at Tulse-hill, Lower Norwood, J. Graham, Army Apothecary on half-pay.

On the 31st of Dec., at Carosal, British Honduras, W. Lindsay, L.R.C.P.Ed., Staff Assistant-Surgeon Army, aged 25.

On the 7th of Jan., at Glasgow, W. Finnie, Army Surgeon on half-pay.

On the 26th of Jan., at Aberdeen, Staff Assistant-Surgeon Wm. Chalmers.

On the 28th ult., at Minster-yard, York, T. Simpson, M.D., aged 74.

On the 3rd inst., Buchanan Marshall, M.D., of Islington, Liverpool.

On the 3rd inst., at Great George-square, Liverpool, John Cooper, Esq., for twenty-nine years Honorary Surgeon, and for several years Senior Consulting Surgeon, to the Liverpool Royal Infirmary, aged 73.

On the 4th inst., at Hunter's-lane, Handsworth, Birmingham, J. S. Butter, M.R.C.S.E., aged 53.

On the 8th inst., at Boulogne-sur-Mer, W. Hopkins, M.D., late Surgeon of the Glamorgan Militia, aged 87.

BOOKS ETC. RECEIVED.

Dr. Ballard on Diseases of Infants.
Dr. Kennedy on a Case like Measles.
Dr. J. Brown's Memories of the Past and Thoughts of the Present.
Memoir of Edmund Lyon, M.D.
Montpellier Medical Journal.
Journal of Botany.

Medical Diary of the Week.

MONDAY, MARCH 16 ...

- LOCK HOSPITAL, Dean-street, Soho.—Clinical Demonstrations and Operations, 1 P.M.
- ST. MARK'S HOSPITAL FOR FISTULA AND OTHER DISEASES OF THE RECTUM.—Operations, 1½ P.M.
- METROPOLITAN FREE HOSPITAL. — Operations, 3 P.M.
- MEDICAL SOCIETY OF LONDON.—8½ P.M. Clinical Discussion.—The President: "A Case of Successful Excision of the Elbow-joint." — Dr. Greenhalgh, Dr. W. Abbotts Smith, Dr. Gibb, Mr. Henry Lee, and other communications.

TUESDAY, MARCH 17...

- GUY'S HOSPITAL.—Operations, 1½ P.M.
- WESTMINSTER HOSPITAL.—Operations, 2 P.M.
- ROYAL INSTITUTION. — 3 P.M. Prof. Marshall, "On Animal Mechanics."
- ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Huxley, "On the Structure and Development of the Vertebrate Skeleton."
- ETHNOLOGICAL SOCIETY. — 8 P.M. Mr. Robert Swinhoe: "Ethnological Notes on Formosa."—Mr. John Crawfurd, "On the Commixture of Races: Western Asia."
- PATHOLOGICAL SOCIETY OF LONDON.—8 P.M.

WEDNESDAY, MAR. 18

- MIDDLESEX HOSPITAL.—Operations, 1 P.M.
- ST. MARY'S HOSPITAL.—Operations, 1 P.M.
- UNIVERSITY COLLEGE HOSPITAL. — Operations, 2 P.M.
- ROYAL COLLEGE OF PHYSICIANS.—5 P.M. Lumleian Lectures: Dr. Chambers: "Formation of Mucus and Pus."

THURSDAY, MARCH 19

- ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
- CENTRAL LONDON OPHTHALMIC HOSPITAL. — Operations, 1 P.M.
- LONDON HOSPITAL.—Operations, 1½ P.M.
- ROYAL FREE HOSPITAL.—Operations, 1½ P.M.
- GREAT NORTHERN HOSPITAL, KING'S CROSS.—Operations, 2 P.M.
- LONDON SURGICAL HOME.—Operations, 2 P.M.
- WEST LONDON HOSPITAL.—Operations, 2 P.M.
- ROYAL ORTHOPÆDIC HOSPITAL. — Operations, 2 P.M.
- ROYAL INSTITUTION. — 3 P.M. Dr. E. Frankland, "On Chemical Affinity."
- ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Huxley, "On the Structure and Development of the Vertebrate Skeleton."
- CHEMICAL SOCIETY. — 8 P.M. Prof. Abel, "On Native Copper."—Dr. Divers: "Decomposition of Gun-Cotton."—Mr. C. G. Williams: "Chenoline Series."—Dr. Attfield: "Oxamide."
- HARVEIAN SOCIETY.—8 P.M. Dr. Sanderson, "On Asthma."
- JUNIOR MEDICAL SOCIETY OF LONDON.—8 P.M. Meeting at University College Hospital. Mr. Talfourd Jones, "On Tuberculous Meningitis."

FRIDAY, MARCH 20.....

- WESTMINSTER OPHTHALMIC HOSPITAL. — Operations, 1½ P.M.
- ROYAL COLLEGE OF PHYSICIANS.—5 P.M. Lumleian Lectures: Dr. Chambers: "Formation of Mucus and Pus."
- ROYAL INSTITUTION.—3 P.M. Mr. Balfour Stewart, "On Magnetic Forces."
- WESTERN MEDICAL AND SURGICAL SOCIETY OF LONDON. — 8 P.M. Mr. Rouse, "On Rheumatic Iritis."

SATURDAY, MARCH 21

- ST. THOMAS'S HOSPITAL.—Operations, 1 P.M.
- ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
- KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
- CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
- ROYAL INSTITUTION. — 3 P.M. Prof. MAX MÜLLER, "On the Science of Language."
- ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Huxley, "On the Structure and Development of the Vertebrate Skeleton."
- METROPOLITAN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—7½ P.M.

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To Correspondents.

LANCASHIRE DISTRESS MEDICAL FUND.

THE Committee have received from the gentlemen who have kindly undertaken the office of almoners the most gratifying statements of the benefits conferred by the funds placed at their disposal. The moneys have been chiefly distributed in the relief of poor lying-in women and other sick persons, who were precluded from obtaining assistance from the general Relief Committees and the Guardians. In this manner the sad task of medical practitioners in the distressed districts has been materially lightened, and much suffering of the severest kind, that could not be reached in any other way, has been relieved. The Committee hope to publish next week a further list of sums distributed, and will be glad to receive from medical practitioners information to guide them in the distribution of the money in hand.

A. B. C.—An answer has already appeared.—1. He could "take the Club," if its rules do not prohibit him.—2. He is not likely to be interfered with.

Dr. Ellis, (Hull.)—The communication shall appear in the next LANCET.

TWIN BIRTH WITH PLACENTA PREVIA.

To the Editor of THE LANCET.

SIR,—As this subject is now being discussed in your pages, and as the recorded cases are so few in number, perhaps you will permit me to trouble you with the notes of a case which has lately come under my notice.

On the 12th of February, Dr. Cassells requested me to see with him a patient of his then in labour. Labour pains first came on at three P.M. At five P.M. Dr. Cassells was sent for. At this time considerable hæmorrhage had taken place, and the patient was greatly alarmed. On examination he found the os uteri slightly dilated, with a roughened surface presenting. This, with the severe hæmorrhage, induced him to believe the case to be one of placenta prævia. At this time hæmorrhage had to a great extent ceased. He, however, with the double object of dilating the os uteri and arresting further hæmorrhage, applied the tampon, and ordered the patient to be kept as quiet as possible. He left the house with directions that if the hæmorrhage returned he was to be sent for immediately. Hæmorrhage came on again at eight P.M. It was at this juncture that I saw the case. The patient was tall, thin, and nervous, aged thirty-five, in her second confinement at the eighth month. She was pale and irritable, with a small, quick pulse, 120. The chamber utensil, a large one, was half full of coagulated blood, and this was said to be only half the quantity which had been lost. On examination with the left hand, I found the os uteri well dilated and soft, with a placenta presenting. Free hæmorrhage was at this time going on. The hand was passed through the placenta, the membranes ruptured, and a foot brought down without much difficulty. In the meantime ergot and brandy had been freely administered by Dr. Cassells. Hæmorrhage was now arrested, and in about fifteen minutes the child was born with but little assistance; the cord severed, and the child removed. At this moment there was a sudden gush of blood, which shot over the side of the bed for several feet. This was controlled by the immediate introduction of the hand into the uterus. A second child was now discovered; the membranes were ruptured, and the feet brought down. Ergot and brandy were again administered, and in about twenty minutes delivery was completed, without further assistance or hæmorrhage.

The first placenta, with a hole in the centre, was brought down by the chin of the second child. The second placenta was found in the vagina, and easily removed. The uterus contracted firmly; a bandage was applied. Ergot and brandy were again administered, and from this time the case did well. On the fifteenth day the mother and children, male and female, were well.

While writing on this case I may mention a circumstance worthy of notice—viz., that this patient was confined in September, 1861, under precisely similar circumstances: twin birth with placenta prævia.

I am, Sir, yours obediently,

Sutherland-street, S.W., March, 1863. THOMAS CHAMBERS.

M.D. can obtain a certified copy of his schedule by applying to the authorities at the College of Surgeons. This will be sufficient for the Naval Medical Department.

Honor, Derbyshire.—The writer of the paragraph referring to this town must attach his name and address to his communication.

X. X.—The "Cochin leg" is a leg affected by elephantiasis. The disease is to be met with in most parts of India, but it is particularly frequent at Cochin.

CHRONIC INDURATION OF THE STERNO-MASTOID MUSCLE IN INFANTS.

To the Editor of THE LANCET.

SIR,—In your journal of January 3rd last, Dr. Wilks refers to three cases of Chronic Induration of the Sterno-mastoid Muscle. He adds that "it is possible that accoucheurs might show that it was connected with the position of the fœtus in utero."

At the beginning of the present year I was called to attend a lady in her confinement. On examination, I discovered a footling presentation, which afterwards proved to be complicated by the funis twice encircling the neck of the child. On the following day the nurse detected an unnatural hardness on the right side of the neck of the infant, which on examination was plainly an induration of about the middle third of the sterno-mastoid muscle. When the face is directed straight forward, there is nothing abnormal to be noticed; but with the face turned to the left side, the indurated mass can be plainly seen, and easily grasped. The feeling communicated by the touch is very peculiar, not unlike, as Dr. Wilks observes, wood fibre; but I think even better described by the mother in comparing it to a fowl's neck.

Dr. Wilks, in the description of his cases, does not mention whether the umbilical cords were in the position of the one described above. If such was the case, it might tend to explain this very unusual appearance.

The child is hearty and well in every other respect, with no history of syphilis, and the enlarged and indurated portion of muscle is gradually softening and disappearing under the application of iodide of potassium ointment.

I am, Sir, yours obediently,

Hitchin, Herts, March, 1863. WM. J. HARRIS, M.R.C.S.

SPECIAL HOSPITALS.

Mr. Westlake has addressed to us a second and somewhat lengthy epistle. He has previously had a fair hearing, and we cannot find in his present letter, although written in a temperate and gentlemanly tone, any arguments of sufficient novelty to warrant further absorption of our space. Mr. Westlake is apparently wholly misinformed as to the extent of instruction which students get in bandaging and the attention given to ulcers of the leg in the out-patient departments and wards of our great hospitals. His institution is founded upon a delusion, and we trust that, as his error is dispelled, he will retire from his present invidious position. *Mr. Harry Lobb* makes up by impertinence what he wants in argument. He founds the excuse for his speculation on the deficiency of the physicians attached to hospitals and practitioners of medicine in "the electro-physiological knowledge necessary to the proper application of medical electricity." His letter is couched in a style singularly illiterate and illogical, and it cannot be inserted.

MAN'S PLACE IN NATURE.

To the Editor of THE LANCET.

SIR,—I shall be glad if you can afford me space for a few words on a subject to which I some time since directed your attention.

Professor Owen, now some years since, published in the "Proceedings of the Linnæan Society" a paper on the "Classification of the Mammalia." He separated man from all other animals, and placed him alone in a sub-kingdom, which he called Archencephala. In this same paper he declared he could discover no *essential* distinction, no distinction other than in *degree*, between the psychical phenomena of a chimpanzee and those of a Bosjesman or an Aztec with arrested brain growth. Man's title to Archencephalism rested on the possession of a *third* posterior lobe of the cerebrum, which projected beyond, and overlapped, the cerebellum, on the presence of a posterior cornu in the lateral ventricle, and on the possession of a hippocampus minor.

It is surely going very far to call this a question of *terms*.

Professor Huxley has now published his book on "Man's Place in Creation." He reiterates the denial, which he has made repeatedly before, of Professor Owen's alleged cerebral distinctions. He supports his assertions by the authority of Tiedemann, Sandifort, Cuvier, Vrolik, Van der Kolk, Gratiolet, Professor Rolleston, Mr. Marshall, Mr. Flower, and Mr. Turner. Professor Huxley says (p. 118), "I am quite ready to demonstrate them (my alleged facts) on the first monkey that comes to hand;" and "in affirming that the posterior lobe, the posterior cornu, and the hippocampus minor exist in certain apes, I am stating either that which is true or that which I know to be false."

The controversy is now reduced to very narrow limits, and it would be uncharitable to doubt that Professor Owen will forthwith refute Mr. Huxley, or retire from the fight, and no longer attempt to support it by the repetition of mere assertions, unsupported by authority or dissection.

I am, Sir, faithfully yours,

March, 1863. FREDERIC D. DYSTER, M.D., F.L.S.

Meteorologist should consult Sir William Herschel's recent work. Mild as our winter has been, it has been cold enough elsewhere. At the opening meeting of the Medical Society of New York, held upon the 4th of February, the mercury stood at 17° below zero. In spite of the cold weather, however, the chamber had filled long before the hour of business.

THE SANATORIUM ASSOCIATION FOR THE TREATMENT OF THOSE MENTALLY AND NERVOUSLY AFFLICTED.

To the Editor of THE LANCET.

SIR,—A new Company, under the above title, has just been started, and two visiting physicians appointed (by whom?)—viz., Richard Quain, M.D., Physician to the Hospital for Consumption at Brompton; and Henry Stevens, M.D., late Resident Physician to St. Luke's. To the latter gentleman there can be no possible objection; in fact, I think it a most judicious appointment, Dr. Stevens having for many years made the treatment of the insane his special study. But what claims or pretensions Dr. R. Quain can have to the office I cannot conjecture. What would be said if a Hanwell or Bethlehem doctor were appointed physician to the Brompton Hospital? Mr. Partridge, I see, is to be one of the surgeons. Perhaps you can inform me if his attention has been directed much to "mental and nervous diseases." It is the duty of shareholders to see that these appointments are not made in a reckless manner.

I remain, Sir, yours, &c.,

March, 1863. OBSERVER.

T. T.—The Manchester Medico-Ethical Association. It has just published its fifteenth Report. Sixty years have passed since the first appearance of Dr. Percival's "Medical Ethics."

Enquirer.—We believe that about thirty patients were treated last year in the "Bourton-on-the-Water Village Hospital." Phthisis is by the rules prohibited from admission.

Student.—1. The greater number of cases of "water on the head" are cases of scrofulous or granular meningitis.—2. Billiet and Barthez.—3. M. Billiet is dead. He was a native of Geneva.

PECULIAR COLORATION OF THE SKIN.

To the Editor of THE LANCET.

SIR,—A few days since, a patient, aged forty, in the last stage of phthisis, directed my attention to the state of the skin in the left axillary and lateral thoracic regions, and also to the corresponding parts of his flannel and linen shirts. I observed that the shirts were marked by a large patch as if stained by port wine. The skin (which was entire) bore a similar appearance. On inquiry, I found that he had been persuaded the night before to drink a tumbler of port wine negus as hot as he could swallow it. The draught caused profuse sweating during the night, and the next morning he noticed the stains alluded to. I assured myself that none of the liquid had been spilled upon the parts, nor did appearances warrant such a conclusion.

Careful testing and microscopical examination gave no evidence of the presence of blood, and I have no doubt that the stains arose from the passage of the colouring matter of the wine passing through the skin.

The phenomenon being quite new to me, and perhaps of some interest in a medico-legal sense, I submit it to the notice of your readers.

I remain, Sir, yours obediently,

Finsbo, March, 1863. DUNCAN SMITH, M.D.

K. puts the following question to us:—"Two gentlemen, both similarly qualified, are elected at the same time surgeons to an hospital. Mr. A. was elected by 410 votes of the governors, Mr. B. was elected by 341 votes. But Mr. B. claims precedence over Mr. A. because he is older by four or five years, and has been four or five years longer in the profession. Query—Has Mr. A. or Mr. B. the right to priority in the hospital?"—We are of opinion that A. takes precedence of B. in the hospital. Being at the head of the poll, he is entitled to that privilege. The case may be argued in this manner: Had there been one vacancy and two candidates, B. would not have been elected. In elections for members of Parliament, the candidate at the head of the poll is, by courtesy and custom, entitled to priority in addressing the constituents. The same practice holds good in the present instance.

IODIDE OF AMMONIUM IN SCROFULOUS ENLARGEMENT OF ABSORBENT GLANDS.

To the Editor of THE LANCET.

SIR,—In reply to your correspondent, "M. R. C. S.," in your last impression, as to the treatment best adapted for the removal of scrofulous enlargements of absorbent glands, I beg to draw attention to the success attending the employment of the iodide of ammonium, as recommended by my brother, Mr. P. C. Price, in his work on "Scrofulous Glands."

This salt I have for the last eighteen months extensively employed in the wards of two institutions devoted solely to scrofulous diseases, and the happy results attending its continued administration have induced me to bring the subject under present notice. The cases I have selected have, as a rule, been those in which prior residence by the sea-side, together with the usual routine of practice, had failed in producing satisfactory results.

The dose prescribed averages from one to four or six grains, according to the patient's age, given in the same vehicles as the iodide of potassium, and repeated twice or thrice daily before meals. I have failed to derive appreciable benefit from a larger dose than six grains. Externally I employ either an ointment, containing from half a drachm to a drachm of the iodide to an ounce of lard, ordering the swelling to be rubbed night and morning, or a liquid application made by dissolving the same quantity of the salt in an ounce of glycerine. This solution is painted over the enlarged glands by means of a camel's-hair brush or feather.

From my experience of the therapeutical action of this valuable agent, I am convinced that this iodide acts more rapidly and effectually than any other of the preparations of iodine now in general use. Two circumstances are likewise favourable to its more extended employment: the stomach is seldom, if ever, in the least affected by a lengthened course of treatment, and as an external application, no stain or discoloration of the skin is produced.

I am, Sir, yours, &c.,

Margate, March, 1863. WILLIAM PRICE, M.D.

P.S.—The iodide of ammonium may be obtained in any quantity from Mr. Fisham, Baker-street, Portman-square.

Kappa.—Some eminent authorities still deny the connexion between rheumatism and chorea. In our opinion the weight of evidence is much against them.

MOTHERLY LOVE.

To the Editor of THE LANCET.

SIR,—You have more than once done good service to the cause of medical education by calling attention to the disgraceful manner in which King's College ignores the value of its young officers, and to the fact that by such a course all those who may eventually gain a high place in the profession will do so in connexion with a school that did not educate them.

Allow me to call your attention to a fact of a similar nature occurring at Charing-cross Hospital. The chair of Botany was vacant by the resignation of Mr. Symes. In the usual course of things, an advertisement for a successor was inserted in the papers. In an unusual course of things, Mr. William Carter was asked to stand, and the request was couched in such a manner as to make it appear that it was wished that he should accept the office. The election took place, two members of the committee only acting, *others being, however, in the house at the time*, and Dr. Hancock Head was the successful candidate.

If these things go by favour, I think Mr. Carter should clearly have received the appointment. If by merit, he has clearly the advantage over Dr. Head.

1. Dr. Head has never taken any prize at any Botanical examination.

2. He was not placed in the examination for honours in Botany at the University of London.

3. He gained the Silver Medal for Materia Medica at the Apothecaries' Hall.

Mr. Carter has gained—

1. Second place in Botany, &c., at the University of London.

2. The Silver Medals in Botany and Materia Medica (with Books) at Apothecaries' Hall.

3. He is by far the most distinguished student at the Charing-cross School.

His only disqualification is that he is younger than Dr. Head. But Dr. Willshire and Dr. Headland occupied the same chair, as far as I can understand, when quite as young, if not younger.

I remain, Sir, yours, &c.,

March, 1863. VERAX.

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. E. Smith; Mr. Westlake; Mr. Hardwicke; Dr. Ellis; Dr. B. Nevins; Dr. J. Struthers; Mr. Gibson, Hull; Mr. J. Procter, Tunstall; Mr. Murrell, (with enclosure;) Mr. Sloper, Tredegar, (with enclosure;) Mr. Rudyard, Bexhill; Mr. T. Hunt, Oldham, (with enclosure;) Mr. Donoghue, Woolton, (with enclosure;) Mr. Wright, Tiverton; Mr. W. H. Moss, Workington; Mr. Foster, Birmingham; Mr. Binks, Wakefield; Mr. Newhouse, Birmingham; Mr. Gentles, Blackhill, (with enclosure;) Dr. Beales, Congleton; Mr. Hatherley; Mr. W. J. Harris, Hitchin; Mr. Burge, Hammersmith; Mr. Chapman, Talywain, (with enclosure;) Mr. Corbett; Mr. Peacock; Mr. Vincent, Camborne; Mr. J. Bridger, Cottenham; Dr. Price, Margate; Mr. Turner, Buntingford, (with enclosure;) Mr. Gamble, Leominster; Mr. Fowler, Winterton, (with enclosure;) Dr. D. Smith; Dr. Black; Dr. Gill, (with enclosure;) Dr. Oliver; Mr. S. Knaggs; Mr. Coombe; Royal Institution; Ethnological Society; Constant Reader; A Student, Banbury; Epidemiological Society; Chemical Society; Medicus, (with enclosure;) Kappa; Delta; Junior Medical Society of London; M.D.; Aide Major; Harveian Society; A Ten Years' Assistant; A Watchman; &c.